4. Parents and Subsidiaries.

The following subsidiaries were 100% owned and were consolidated by the Corporation at December 31, 1979:

Name of subsidiary	State or other jurisdiction in which incorporated
A & G Transportation Company	Delaware
Alside, Inc.	Delaware
Bessemer and Lake Erie Railroad Company	Pennsylvania
Birmingham Southern Railroad Company	Alabama
Carnegie Natural Gas Company	Pennsylvania
Duluth, Missabe and Iron Range Railway Company	Minnesota
Elgin, Joliet and Eastern Railway Company	Illinois and Indiana
Essex Minerals Company	New Jersey
Lake Terminal Railroad Company, The	Ohio
McKeesport Connecting Railroad Company	Pennsylvania
Navios Corporation	Liberia
Navios Ship Management Services, Inc.	Liberia
Ohio Barge Line, Inc.	Pennsylvania
Orinoco Mining Company	Delaware
Pittsburgh & Conneaut Dock Company, The	West Virginia
Quebec Cartier Mining Company	Province of Quebec, Canada
River & Gulf Transportation Company	Delaware
Union Railroad Company	Pennsylvania
United States Steel International, Inc.	New Jersey
United States Steel International Sales Company	Delaware
USS Engineers and Consultants, Inc.	Delaware
USS Novamont, Inc.	Delaware
USS Oilwell Supply Co., Ltd.	Delaware
Warrior & Gulf Navigation Company	Delaware

The following subsidiaries were 100% owned and were not consolidated by the Corporation at December 31, 1979:

Name of subsidiary	State or other jurisdiction in which incorporated
Percy Wilson Mortgage and Finance Corporation	Delaware
U. S. Steel Credit Corporation	Delaware

The names of other subsidiaries, both consolidated and unconsolidated, have been omitted as these unnamed subsidiaries, considered in the aggregate as a single subsidiary, do not constitute a significant subsidiary.

5. Legal Proceedings.

During the past several years, the Department of Justice has served U. S. Steel with a number of Civil Investigative Demands relating to portions of its business. Documents are being, or have been, furnished pursuant to the terms of CID's relating to hot rolled sheet product (1977 and 1979), iron ore (1978) and oil country tubular goods (1979).

RMI Company, a partnership in which the Corporation owns a 50% interest, in April of 1979 entered a plea of *nolo contendere* to a September 28, 1978, criminal antitrust indictment, and a fine of $600,000 was entered against the company. Certain civil actions have been filed against RMI as the result of the criminal case, but the Corporation believes that any liability involved in such proceedings will not have a material adverse effect upon its financial position.

On February 29, 1980 the United States District Court for the Northern District of Ohio, Eastern Division, entered a preliminary injunction enjoining the Corporation from proceeding with the announced closing of the Youngstown (Ohio) Works pending the disposition of a lawsuit brought by employees at the Youngstown Works, and others, against the Corporation alleging the existence of a duty of the Corporation to continue to operate the Youngstown Works. The trial of this case is scheduled to begin on March 17, 1980.

Except as otherwise noted, as of January 31, 1980, the following environmental proceedings were pending or contemplated. Except as described herein, it is not possible to predict accurately the possible outcome of these matters; however, the expenditure authorization estimates and management's view as to the outcome of such proceedings set forth under Environment and Other Regulatory Matters take such matters into account.

On May 9, 1973, the Commonwealth of Pennsylvania brought an action in the Common Pleas Court of Bucks County, Pennsylvania, under state law seeking a preliminary and mandatory injunction for alleged air and water pollution by the Corporation's Fairless Works.

On July 3, 1975, the Illinois EPA brought an action against the Corporation before the Illinois Pollution Control Board alleging operation of the Corporation's Joliet Works without an operating permit required under Illinois regulations. This proceeding was stayed by the Illinois Appellate Court in connection with an ancillary proceeding to review the validity of the permit regulations. The Court's stay order expired on August 18, 1978. There has been no action since the termination of the stay to recommence prosecution of the case by the Illinois EPA.

On September 17, 1975, the Pennsylvania Department of Environmental Resources (DER) filed an action against the Corporation before the Pennsylvania Environmental Hearing Board alleging violation of air pollution regulations at the sinter plant of the Corporation's Fairless Works. The department seeks $10,000 plus $2,500 per day from October 26, 1972, until compliance. Settlement discussions are continuing with the department in an attempt to resolve this suit.

On August 2, 1977, the Corporation was served with a complaint filed by the United States of America concerning alleged instances of air pollution at the open hearth shop and sinter plant at the Corporation's Youngstown Works. The complaint, as amended on January 19, 1978, seeks injunctive relief to require the Corporation to cease alleged emissions in violation of applicable standards and to install pollution control equipment and, in addition, civil penalties of $25,000 per day since August 7, 1977. The Corporation has announced that Youngstown Works will be shut down by June 30, 1980.

On January 24, 1979, the United States of America filed a complaint with the United States District Court for the Northern District of Ohio alleging violations of the Federal Water Pollution Control Act and a National Pollutant Discharge Elimination System Permit at the Corporation's Lorain Works. The complaint seeks civil penalties of $10,000 for each day of violation since July 1, 1977, and an injunction against further violations. Water pollution control facilities have been constructed pursuant to a schedule agreed upon with the Ohio EPA. A consent decree is being negotiated with the U. S. EPA.

On February 6, 1979, the Corporation was served with a complaint filed by the United States of America which alleges instances of air pollution and which demands civil penalties of $25,000 per day from August 7, 1977, and injunctive relief with respect to the sinter plant, hot scarfer, BOP shop, coke batteries and blast furnace cast houses at Lorain Works. Control facilities to meet all of the demands in the suit would require expenditures broadly appraised to cost $100 million. However, the Corporation currently is proposing in settlement of the suit to construct control facilities which would cost substantially less than that and which the Corporation believes would result in substantial compliance with the regulations.

On December 22, 1978, the U.S. EPA filed a complaint which was amended on July 20, 1979, against the Corporation in the United States District Court for the Northern District of Indiana concerning alleged instances of air pollution at all eight coke batteries and the No. 3 sinter plant at Gary Works seeking to enjoin operation of these facilities and to assess civil penalties against the Corporation in the amount of $25,000 per day for each alleged violation. The Corporation is conducting discussions with the U.S. EPA concerning a proposed consent decree which would resolve this litigation. Control facilities to meet all of the demands in this suit would require expenditures broadly appraised to cost $210 million. However, the Corporation currently is proposing in settlement of this suit to construct control facilities which would cost substantially less than that and which the Corporation believes would result in substantial compliance with the regulations.

On August 6, 1979, a second amended complaint was filed against the Corporation by the State of Illinois before the Illinois Pollution Control Board containing seventeen counts of alleged violations from 1972 to date at the Corporation's South Works in Chicago, Illinois. The subject facilities are two 200-ton electric arc furnaces, the basic oxygen process furnace shop (BOP Shop) and the flux transport handling system servicing the BOP Shop, the argon-oxygen decarburization vessel and the sinter plant. The complaint seeks to assess a $10,000 fine for each of the seventeen counts of the complaint plus daily fines of $1,000 for each day that the alleged violations continue on each count and asks for an injunction requiring the Corporation to cease and desist from further violations and to obtain all necessary permits from the Illinois EPA. Since the filing of the suit, the Corporation has received twelve notices of air pollution violations from the Illinois EPA relating to many of the facilities enumerated in the complaint. Control facilities to meet all of the demands in this suit would require expenditures broadly appraised to cost $46 million. However, the Corporation currently is proposing in settlement of the suit to construct control facilities which would cost substantially less than that and which the Corporation believes would result in substantial compliance with the regulations.

As reported in the Form 10-Q filed by the Corporation for the quarter ended June 30, 1979, on June 11, 1979, a Section 113 Notice of Violation was issued by the U.S. EPA, Region V, alleging that the boilerhouse located at the Haverhill Plant of USS Chemicals in Ironton, Ohio, was in violation of Ohio regulations concerning particulate matter emissions. The Corporation negotiated a settlement of this matter with the Ohio EPA and on January 14, 1980, a civil suit was filed by the State of Ohio against the Corporation in the Court of Common Pleas of Scioto County, Ohio, for the purpose of entering a Consent Judgment. The Judgment was entered on January 17, 1980, providing that the Corporation install pollution control equipment on the boilers pursuant to a compliance schedule.

On June 22, 1979, the Pennsylvania Department of Environmental Resources (DER) filed a complaint with the Pennsylvania Environmental Hearing Board seeking the assessment of civil penalties against the Corporation under the Pennsylvania Air Pollution Control Act and the Pennsylvania Clean Streams Law for alleged air and water violations at the Corporation's Fairless Works in Bucks County, Pennsylvania. The suit alleges air violations since October 26, 1972, with respect to burning undesulfurized coke oven gas and emissions from the coke battery combustion stacks, blast furnace cast houses, open hearth shop and the electric furnace shop and water violations from industrial waste impoundments. Settlement negotiations with the Pennsylvania DER are in progress with respect to the blast furnace cast houses, open hearth shop and electric furnace shop coincident with settlement negotiations of two suits filed by the U.S. EPA on October 18, 1979, and February 22, 1980, and reported hereafter. Separate settlement negotiations are being conducted with the state with respect to the industrial waste impoundments, the burning of undesulfurized coke oven gas and coke battery emissions.

On October 18, 1979, the U.S. EPA filed a civil suit in the United States District Court, Eastern District of Pennsylvania, alleging air pollution violations at the blast furnaces, sinter lines, open hearth shop and electric furnace shop at the Corporation's Fairless Works and on February 22, 1980, the EPA filed a second suit alleging air pollution violations at the coke oven batteries, including coke oven gas sulphur content, at this same plant. In the first suit, the State of New Jersey, the City of Bordentown, New Jersey, and the Commonwealth of Pennsylvania, have been granted permission to intervene. Both suits seek to enjoin the discharge of air pollutants in violation of the Pennsylvania State Implementation Plan (SIP). In the first suit EPA has demanded civil penalties in the sum of $6.45 million. In the second suit EPA has not specified the dollar amount of penalties it will seek. Control facilities to meet all of the U.S. EPA's demands in these two suits, as well as all of the Pennsylvania DER's demands reported in the preceding paragraph would require expenditures broadly appraised to cost $180 million. However, the Corporation currently is proposing in settlement of both the U.S. EPA suits and the Pennsylvania DER suit reported in the preceding paragraph to construct control facilities which would cost substantially less than that. The Corporation believes this would result in substantial compliance with the regulations, in part, through use of the "bubble concept" whereby alternative controls would be utilized.

The following proceedings have been initiated by the Corporation to seek judicial review of administrative action concerning environmental matters of Federal, state or local governmental agencies.

On September 17, 1976, June 23, 1977, and September 12, 1979, the Corporation filed a Petition and Amendments in the United States Court of Appeals for the Sixth Circuit for Review of the Federal Sulfur Dioxide Plan for Ohio as promulgated on August 27, 1976, and as amended on May 31, 1977, by the EPA. On July 25, 1978, the Corporation filed with the U.S. EPA a Petition for Revision of the Federal Sulfur Dioxide Plan for Ohio as applied to the Ohio Works Plant and the McDonald Mills Plant of the Corporation's Youngstown Works. The Petition is being held in abeyance pending voluntary reassessment of sulfur dioxide regulations for the Youngstown, Ohio, area by the U.S. EPA. In view of the announced shutdown of Youngstown Works by June 30, 1980, the Petition may be withdrawn. The Corporation on January 22, 1979, submitted to the U.S. EPA a proposed revised Federal Sulfur Dioxide Plan for Lorain-Cuyahoga Works, Lorain Plant. If the U.S. EPA accepts this plan, this suit will be resolved.

On April 20, 1977, the Corporation filed a Petition with the Ohio EPA for Initiation of Rulemaking Proceedings Considering Particulate Emissions of Sintering Plants with specific reference to the No. 2 Sinter Plant at the Corporation's Youngstown Works. This will become moot upon shutdown of the Youngstown Works which has been announced to occur by June 30, 1980.

On June 7, 1977, the Corporation filed with the Ohio EPA a Request for Adjudication Hearing from the Director's denial of a variance to operate No. 2 Sinter Plant at the Corporation's Youngstown Works. A hearing was refused and this was appealed to the Environmental Board of Review and to the Franklin County Court of Appeals. The decision was reversed and remanded for a hearing. This matter has been stayed pending shutdown of the Youngstown Works which has been announced to occur by June 30, 1980.

The Corporation filed four Petitions for Review of action taken by the U.S. EPA in designating specific geographical areas as nonattainment areas with respect to Federal ambient air quality standards pursuant to Section 107(d) of the Clean Air Act, which designations were published at 43 Federal Register 8962, et seq., on March 3, 1978. The Petitions were filed in the United States Court of Appeals, Fifth Circuit, Sixth Circuit, Seventh Circuit, and Eighth Circuit in April and May, 1978. The Corporation's contention is that these geographic areas should not have been designated nonattainment areas. On May 3, 1979, the Fifth Circuit Court of Appeals invalidated U.S. EPA's designation and issued orders that the State of Alabama should submit new proposed designations for action by U.S. EPA. On August 1, 1979, the Seventh Circuit Court of Appeals upheld the designation by U.S. EPA of Lake County, Indiana, as a nonattainment area with respect to sulfur dioxide and on September 21, 1979, the Corporation filed a Petition to the United States Supreme Court for issuance of a Writ of Certiorari. On January 14, 1980, the United States Supreme Court denied the Petition for a Writ of Certiorari. On February 8, 1980, the Corporation filed in the United States Supreme Court a motion for an extension of time to petition for a rehearing or, in the alternative, a request for a rehearing. Neither the Sixth Circuit Court of Appeals nor the Eighth Circuit Court of Appeals has rendered a decision.

As a result of the action by the Fifth Circuit Court of Appeals invalidating the nonattainment designation, the suit filed by the Corporation in the Fifth Circuit Court of Appeals to review the April 4, 1979, final action of the U.S. EPA in approving as part of the Alabama State Implementation Plan certain revised coke oven regulations adopted by the Alabama Air Pollution Control Commission, which suit was reported in the Form 10-Q filed for the quarter ended September 30, 1979, was stayed on August 21, 1979, by the Court of Appeals pending a request by either party to reactivate the suit.

On December 9, 1977, after the Corporation's application for operating permits for the blast furnaces at South Works was denied, the Corporation filed a Petition before the Illinois Pollution Control Board seeking a reversal of this action. On November 21, 1978, the Board granted the Petition and ordered the Illinois EPA to issue the disputed permits. The Illinois EPA issued permits effective for a one-year term and appealed the Board's decision to the Illinois Appellate Court. This appeal was dismissed as moot by the Appellate Court on September 28, 1979, as a result of changes in the Illinois rules applicable to blast furnaces. On November 6, 1979, the Illinois EPA denied the Corporation's application for a renewal of the one-year permit. On December 12, 1979, the Corporation filed a petition before the Board seeking review of the Illinois EPA's denial of the permit renewal on the basis that the Board's prior decision necessitated renewal of the permit. On December 20, 1979, the Illinois Appellate Court recalled its mandate of dismissal of the Illinois EPA's appeal of the Board's decision.

On February 7, 1978, the Corporation filed a Notice of Appeal with the Ohio Environmental Board of Review seeking review of portions of the water quality standards adopted by the Ohio EPA on December 30, 1977.

On September 7, 1978, the Corporation filed with the Ohio EPA a Request for Modification of a National Pollutant Discharge Elimination System Permit at the Corporation's Lorain-Cuyahoga Works, Lorain Plant.

On January 8, 1979, the Corporation filed an appeal in the Franklin County, Ohio, Court of Appeals from the action of the Ohio Environmental Board of Review in refusing to grant a variance and adjudication hearing in connection with the coke plant, sinter plant and hot scarfer at the Corporation's Lorain-Cuyahoga Works, Lorain Plant.

On January 29, 1979, the Corporation filed with the Ohio Environmental Board of Review an appeal from the action of the Ohio EPA in denying an application for a permit to operate the hot scarfer and an application for a permit to operate the sinter plant at the Lorain-Cuyahoga Works, Lorain Plant.

On March 8, 1979, the Corporation filed a Petition in the United States Circuit Court of Appeals for the District of Columbia pursuant to Section 307(b) of the Clean Air Act for review of the action of the U.S. EPA in issuing on January 16, 1979, the revised Emission Offset Interpretative Ruling published at 44 Federal Register 3274, et seq.

On July 31, 1979, the Corporation filed with the Pennsylvania Commonwealth Court a Petition for Review of the Pennsylvania State Implementation Plan with respect to offset regulations governing areas which are nonattainment areas as to Federal ambient air quality standards. The Corporation also filed a Petition for Amendment and/or Repeal of Regulations with respect to the same subject matter with the Pennsylvania Environmental Quality Board on July 26, 1979.

On August 10, 1979, the Corporation filed a Petition before the Illinois Pollution Control Board to contest the denial by the Illinois EPA of the Corporation's application seeking an operating permit for its two-hundred ton electric furnaces at South Works. This Petition is currently pending before the Board.

On September 4, 1979, the Corporation, the American Iron and Steel Institute and other named steel companies filed a Petition for Review with the United States Third Circuit Court of Appeals seeking review of the regulations promulgated by the U.S. EPA governing the administration of the National Pollutant Discharge Elimination System permit program.

On September 4, 1979, the Corporation, the American Iron and Steel Institute and other named steel companies filed a Complaint for Declaratory Judgment and Injunctive Relief with the United States District Court for the Western District of Pennsylvania concerning the regulations promulgated by the U. S. EPA governing the administration of the National Pollutant Discharge Elimination System permit program.

On September 10, 1979, the Corporation filed in the United States Third Circuit Court of Appeals a Petition for Review of the U. S. EPA's promulgation of Pennsylvania coke oven regulations as they apply to the Corporation's Fairless Works, which were published on July 17, 1979, at 44 Federal Register 41429, et seq.

On September 27, 1979, the Corporation filed an appeal with the Ohio Environmental Board of Review from the action of the Ohio EPA in adopting sulfur dioxide regulations applicable to the Lorain-Cuyahoga Works, Lorain Plant.

On October 9, 1979, the Corporation filed a Notice of Appeal with the Pennsylvania Environmental Hearing Board seeking review of the amendments to the Pennsylvania water quality standards promulgated on September 8, 1979.

On October 11, 1979, the Corporation filed a Notice of Appeal with the Ohio Environmental Board of Review from the promulgation by the Ohio EPA of hydrocarbon rules as part of Ohio's proposed revision of its State Implementation Plan.

On October 15, 1979, the Corporation, together with the American Iron and Steel Institute and other named steel companies, filed a Petition for Issuance of a Rule with the Administrator of the U.S. EPA requesting that ammonia and sulfide be identified as conventional pollutants, pursuant to Section 304(a)(4) of the Clean Water Act.

In addition to these proceedings Alside, Inc., has initiated the following two proceedings. On September 26, 1975, Alside, Inc., filed with the Ohio EPA a Request for Adjudication Hearing from Orders of the Director proposing denials of variances to operate sources emitting hydrocarbons at Alside, Inc.'s Akron, Ohio, plant. On May 25, 1979, Alside, Inc., filed with the Ohio EPA a request for Modification of a National Pollutant Discharge Elimination System Permit of Alside, Inc., at its Akron, Ohio, plant.

Other Environmental Matters

In addition to the above proceedings, discussions are in progress in response to notices of violation and other instances of possible contemplated legal proceedings issued by Federal, state and local agencies with respect to certain of the Corporation's facilities.

Notices of violation, which allege violations by the Corporation of state air pollution control regulations, have been issued by the U.S. EPA under Section 113 of the Clean Air Act. The facilities involved in such notices of violation are the blast furnaces at South Works; boiler houses (McDonald Mills and Ohio Works) at Youngstown Works; boilers at Haverhill, Ohio, plant of USS Chemicals; five coke quench stations at Lorain Plant; and the sinter plant and open hearth at Geneva Works. Under Section 113, the administrator of the EPA may issue a compliance order, commence a civil action for relief, or in certain instances, commence an action for criminal penalties if the violation continues after 30 days from the date of notice. However, the notice first offers the Corporation an opportunity to discuss the alleged violation. The Corporation has requested a conference in response to each notice, and in many instances negotiations are under way concerning proposed corrective measures. Such negotiations are in progress with the State of Utah and the U.S. EPA with respect to air emission sources at the Corporation's Geneva Works. The air pollution control facilities which the Corporation believes would resolve the matters under discussion are estimated to cost $62 million.

Alside, Inc., a wholly owned subsidiary of the Corporation, received on July 22, 1978, a Notice of Violation from the U.S. EPA under Section 113 relating to hydrocarbon emissions at its plant in Akron, Ohio. The EPA and Alside, Inc., have entered into discussions concerning proposed corrective measures.

From time to time, state and local governmental agencies advise source owners of alleged violations of air and water pollution regulations through issuance of notices of violation or orders to comply in lieu of the commencement of a legal proceeding and are generally for the purpose of initiating discussions concerning corrective measures. The facilities involved in such unresolved notices of violation and orders are: the coke batteries, including the coke battery combustion stacks at Gary Works; the electric furnace shop; the BOP shop; stockpile area; blast furnaces, and blast furnace cast house at South Works; the cement operations of the Corporation's Universal Atlas Cement Division Waco Plant; the Corporation's Cumberland Coal operation; several vessels in the Corporation's Great Lakes Fleet; and the nitric acid plant at the Corporation's USS Agri-Chemicals Division Cherokee Plant. In addition, RMI Company, a partnership in which the Corporation owns a 50% interest, has received a Notice of Violation from the State of Missouri relating to its operations in Washington, Missouri. Discussions are under way concerning proposed corrective measures with the appropriate state or local governmental agency in each case.

The Corporation's Western District Coal Operations received a notice dated October 11, 1979, from the Mined Land Reclamation unit of the Colorado Department of Natural Resources which stated that an inspection of the Somerset Mine on September 9, 1979, revealed several alleged violations of the Colorado Surface Coal Mining and Reclamation Act. The Somerset Mine was directed to have a proper sediment control system in place and to relocate stockpiles or make necessary changes in the applicable mining plan by November 28, 1979, and to apply for a permit immediately from the United States Corps of Engineers for the in-stream rock fill. The Corporation is engaged in negotiations with the state agency to resolve this matter.

On October 15, 1979, USS Novamont, Inc., a wholly owned subsidiary of the Corporation, furnished the U.S. EPA, Region III, with the information it had requested in connection with an alleged violation of a National Pollutant Discharge Elimination System permit at its Neal, West Virginia, plant. (This Notice of Violation was reported in the Form 10-Q report filed by the Corporation for the quarter ended September 30, 1979.)

On November 2, 1979, a vessel of the River & Gulf Transportation Company allegedly discharged diesel fuel into the lower Mississippi River near Memphis, Tennessee. The U.S. Coast Guard is investigating the incident and it is anticipated that a penalty may be assessed against this subsidiary in the amount of $100 or less.

On November 5, 1979, the U.S. EPA, Region IV, issued two Notices of Violation to the Corporation's Lynch District, Kentucky, coal mines alleging a failure of the mines to submit discharge monitoring reports as required by their National Pollutant Discharge Elimination System permits. The Corporation responded to both Notices of Violation on November 20, 1979, indicating that the reports had been submitted as required and requesting that the Notices of Violation be withdrawn.

On November 9, 1979, the Illinois EPA notified the Corporation's South Works of an alleged violation of state environmental laws and regulations relating to emissions from the roof monitor of the BOP shop.

On November 14, 1979, and December 13, 1979, the Illinois EPA notified the Corporation's South Works of alleged violations of state environmental laws and regulations relating to emissions from the electrode ports and from tapping of the No. 4 electric arc furnace and by reason of an alleged failure of the No. 4 electric arc furnace to have an operating permit issued by the State of Illinois and by reason of an alleged failure of the No. 4 electric arc furnace to comply with the requirements of Illinois regulations relating to operations during periods of malfunction.

On November 21, 1979, U.S. EPA, Region IV, notified the USS Agri-Chemicals Bartow, Florida, Plant of an alleged violation of a National Pollutant Discharge Elimination System permit. On November 29, 1979, the Corporation notified the Agency of the corrective action that had been taken.

On December 4, 1979, the Corporation's USS Agri-Chemicals Division was served with a Notice of Violation under Section 113 of the Clean Air Act that was issued by the U.S. EPA, Region VII, Kansas City, Missouri, alleging that the USS Agri-Chemicals Division is in violation of the Prevention of Significant Air Quality Deterioration Regulations (PSD) and regulations relating to Standards of Performance for New Stationary Sources, 40 CFR, Part 60, Subpart G (NSPS) Regulations with respect to the construction and operation of a new nitric acid plant at the Crystal City, Missouri, facility. It is alleged that construction and operation of the nitric acid plant was undertaken without preconstruction review and approval as required by PSD regulations and that since commencing operation of the plant, the Corporation has failed to conduct performance tests, to install a continuous monitoring system and to submit quarterly excess emission tests as required by Standards of Performance for New Stationary Sources regulations. The U.S. EPA may commence a civil action for a permanent or temporary injunction or may assess and recover a civil penalty of not more than $25,000 per day of violation.

On December 5, 1979, the Corporation obtained from the Alabama Surface Mining Reclamation Commission two abatement extensions until March 1, 1980, for alleged violations, claiming that runoff from the mine site was not being diverted through a sediment basin at the Corporation's Southern District Coal Operations (Concord and Oakgrove Mines). The two Notices of Violation that had been issued by the Commission were reported in the Form 10-Q filed by the Corporation for the quarter ended June 30, 1979.

On December 12, 1979, U.S. EPA, Region VI, notified the Corporation's Texas Works at Baytown, Texas, that on November 4, 1979, discharges allegedly violated the permissible limits for discharges of total suspended solids and oil and grease of a National Pollutant Discharge Elimination System permit. Prior to receipt of this Notice, the Corporation had advised the U.S. EPA and the Texas Department of Water Resources of the discharges in excess of the limits set in the permit and of the corrective action that had been taken.

As reported in the Form 10-Q filed for the quarter ended September 30, 1979, on June 5, 1979, the U.S. EPA, Region V, notified the Corporation of alleged violations of a National Pollutant Discharge Elimination System permit and a related Consent Decree at the Corporation's Gary Works. On December 12, 1979, the U.S. EPA notified the Corporation that a penalty in an amount to be determined will be assessed against the Corporation. A tentative agreement has been reached with the U.S. EPA which must be submitted to the United States District Court, Northern District of Indiana.

On December 13, 1979, the U.S. Department of the Interior Office of Surface Mining Reclamation and Enforcement issued a Notice of Violation to the Dilworth coal mine of the Corporation's Frick District Coal Operations alleging failure to pass all surface drainage from the disturbed area through a sedimentation pond or a series of sedimentation ponds and failure to meet numerical effluent limits.

On December 28, 1979, the Ohio EPA notified the Corporation's USS Chemicals Haverhill, Ohio, Plant that, based upon a review of monthly operating reports for deep well injection facilities to determine compliance with a permit, a plan to achieve compliance with permit requirements and to eliminate unsatisfactory conditions must be submitted within 30 days or enforcement action will be taken. Discussions with the Agency to resolve this matter are being conducted.

On January 8, 1980, the Ohio EPA notified the Corporation's USS Chemicals Haverhill, Ohio, Plant that discharges of oil, grease and chromium from the plant allegedly exceeded the conditions of a National Pollutant Discharge Elimination System permit and that legal action might be instituted. Discussions with the Agency relative to corrective action are being conducted.

On January 11, 1980, the Ohio EPA notified Alside, Inc. of alleged violations of Ohio rules concerning waste disposal. Discussions with the Agency to resolve this matter are being conducted.

On January 31, 1980, the Minnesota Pollution Control Agency notified the Corporation's Minnesota Ore Operations that alleged violations of the Minnesota Pollution Air Quality Rules were observed on September 26, 1979, in the waste gases from certain agglomerator stacks. The Corporation has scheduled a meeting with the Agency to discuss this matter.

The following proceedings which have not previously been reported as terminated were terminated during 1979.

As reported previously, the Corporation, the Alabama Air Pollution Control Commission, the Jefferson County, Alabama, Board of Health, the U.S. EPA and the U.S. Justice Department signed a Supplemental Agreement concerning the Corporation's Fairfield Works Q-BOP. On July 16, 1979, an order was filed in the U.S. District Court for the Northern District of Alabama dismissing the suit that had been filed against the Corporation on September 6, 1978.

In September of 1979, the River & Gulf Transportation Company, a wholly owned subsidiary, paid to the U.S. Coast Guard a $100 penalty for an alleged discharge of fuel oil into the Mississippi River at Norco, Louisiana, from one of its barges on March 28, 1979.

On October 3, 1979, the Corporation furnished the U.S. EPA, Region IV, with the information it had requested in connection with an alleged violation of a National Pollutant Discharge Elimination System permit at the Corporation's Fairfield Works. This Notice of Violation was reported in the Form 10-Q filed for the quarter ended September 30, 1979.

On October 10, 1979, the Corporation paid to the U.S. Coast Guard a $30 penalty for an alleged discharge of oil into the Monongahela River from the Corporation's Clairton Works on February 6, 1979.

On October 18, 1979, the U.S. EPA, Region III, advised the Corporation that the Corporation has complied with an order issued by the Agency on August 27, 1979, alleging a failure of the Corporation's Gary District, West Virginia, Coal Mine No. 20 to submit discharge monitoring reports. The findings of violation and order for compliance have been withdrawn.

In November of 1979, Ohio Barge Line, Inc., a wholly owned subsidiary, paid to the U.S. Coast Guard a $25 penalty for an alleged discharge of diesel fuel into the Ohio River at Neville Island, Pennsylvania, on January 25, 1979.

On November 1, 1979, the Corporation paid a $150 penalty to the Bay Area Air Quality Management District (California) in settlement of a Notice of Violation issued on August 6, 1979, to the Corporation's Pittsburg Works alleging air emissions from the cyclone separator at the wire mill which exceeded visible emission limitations.

On November 5, 1979, the Corporation paid a penalty of $100 to the U.S. Coast Guard for an alleged discharge of oil from the Corporation's Homestead Works on February 28, 1979.

On November 7, 1979, the United States Department of the Interior Office of Surface Mining Reclamation and Enforcement issued two Notices of Violation to the Corporation's Lynch District, Kentucky, coal mines alleging failure to have plans approved by the state regulatory authority for disposal of excess rock and earth materials from underground workings in surface disposal areas and requesting plan submittal and abatement. On November 27, 1979, the Corporation was notified that no penalties will be assessed for these two Notices of Violation. These two Notices of Violation were terminated on December 20, 1979.

On November 7, 1979, and November 20, 1979, the United States Department of the Interior Office of Surface Mining Reclamation and Enforcement terminated two Notices of Violation issued on September 5, 1979, to two of the Corporation's Lynch District, Kentucky, coal mines. On November 21, 1979, this same Agency terminated a Notice of Violation issued on July 27, 1979, to one of the Corporation's Gary District, West Virginia, coal mines.

On November 8, 1979, the Corporation paid a penalty of $100 to the U.S. Coast Guard for an alleged discharge of oil from the Corporation's Homestead Works on February 9, 1979.

On November 9, 1979, the Corporation paid a penalty of $1,000 to the U.S. Coast Guard for an alleged violation of Federal regulations relating to procedures for off-loading oil from three barges that occurred at the Corporation's National-Duquesne Works (National Plant) on October 27, 1978.

On November 21, 1979, the Corporation paid a penalty of $75 to the U.S. Coast Guard for an alleged discharge of oil from the Corporation's National-Duquesne Works (National Plant) on December 20, 1978.

On June 25, 1979, the Corporation filed a Petition before the Illinois Pollution Control Board to contest the denial by the Illinois EPA of the Corporation's application for an operating permit with respect to its nail galvanizing facilities at its Joliet Works. On November 29, 1979, the Corporation withdrew this Petition because of the cessation of the nail galvanizing operation at Joliet Works.

On November 28, 1979, the U.S. Department of the Interior Office of Surface Mining Reclamation and Enforcement issued a Notice of Violation to one of the Corporation's Gary District, West Virginia coal mines alleging a failure to pass all surface drainage from a disturbed area through a sedimentation pond or a series of sedimentation ponds. A penalty of $800 was assessed for this alleged violation, which penalty is being contested by the Corporation. On December 18, 1979, this Notice of Violation was terminated.

On December 4, 1979, the Corporation paid a penalty of $25 to the U.S. Coast Guard for an alleged discharge of oil from the Corporation's National-Duquesne Works (National Plant) on December 14, 1977.

On December 5, 1979, the U.S. Department of the Interior Office of Surface Mining Reclamation and Enforcement issued a Notice of Violation to the No. 4 mine and tipple of the Corporation's Gary, West Virginia, coal operations alleging a failure to pass all surface drainage and underground drainage removed from the mine through a sediment pond or a series of sediment ponds. No penalty was assessed for this alleged violation and the Notice of Violation was terminated on December 14, 1979.

On December 7, 1979, the Corporation paid a penalty of $1,000 to the U.S. Coast Guard for an alleged discharge of oil from the Corporation's Edgar Thomson-Irvin Works (Edgar Thomson Plant) on March 22, 1979.

On December 7, 1979, the U.S. EPA notified the Corporation that it had withdrawn the Findings of Violation and Order for Compliance issued on August 27, 1979, to the Corporation's Gary District, West Virginia, coal mines.

On December 14, 1979, the U.S. Department of the Interior Office of Surface Mining Reclamation and Enforcement terminated a Notice of Violation that had been issued to the Corporation's Alpheus coal mine of its Gary, West Virginia District Coal Operations because appropriate remedial action to control soil erosion and to plant a suitable vegetative cover had been taken.

On December 20, 1979, the Corporation paid a penalty of $100 to the U.S. Coast Guard for an alleged discharge of oil from the Corporation's Edgar Thomson-Irvin Works (Edgar Thomson Plant) on June 20, 1979.

On December 20, 1979, the U.S. Department of the Interior Office of Surface Mining Reclamation and Enforcement terminated Violation No. 1 of two Notices of Violation issued on November 7, 1979, to two coal mines of the Corporation's Lynch, Kentucky, District Coal Operations because appropriate remedial measures had been taken.

On December 28, 1979, the Corporation entered into an oral agreement with the U.S. EPA, Region III, relating to the teeming operation at the Corporation's Edgar Thomson-Irvin Works (Edgar Thomson Plant) BOP shop pursuant to which paragraph 4(a) of the Consent Decree for the Corporation's steel plants in the Monongahela Valley will be modified to eliminate the need to install additional control facilities at this operation at this time.

On August 2, 1979, the Corporation filed in the United States Third Circuit Court of Appeals a Petition for Review of the U.S. EPA's promulgation of Pennsylvania sulfur regulations for southeastern Pennsylvania, which were published on June 4, 1979, at 44 Federal Register 31980, et seq. This Petition was withdrawn by the Corporation on December 31, 1979.

On January 7, 1980, the United States District Court for the Southern District of Texas signed a Modified Consent Decree concerning the Corporation's Houston, Texas, chemical plant. An initial Consent Decree had been entered into on June 6, 1977, by Arco Polymers, Inc., from whom the Corporation acquired the plant. The Modified Consent Decree requires the Corporation to limit its discharge of waste water pollutants as specified in the Decree by February 1, 1980, and to pay a penalty of $60 per day until February 1, 1980, or until the date the discharge limits specified are attained, whichever is sooner.

In the Form 10-Q which was filed for the quarter ended September 30, 1979, it was reported that the U.S. EPA, Region V, assessed a $2,500 penalty against the Duluth, Missabe and Iron Range Railway Company, a wholly owned subsidiary of the Corporation, for an alleged failure to comply with spill prevention control requirements for its locomotive fueling facility at Two Harbors, Minnesota. The penalty was reduced to $500 and paid on January 16, 1980, by the Railway concurrently with the execution of a settlement agreement.

In the Form 10-Q which was filed for the quarter ended June 30, 1979, it was reported that the Corporation was contesting a penalty of $5,200 assessed by the U. S. Department of the Interior Office of Surface Mining and Reclamation. On January 25, 1980, this Agency reduced the penalty to $3,400.

6. Increases and Decreases in Outstanding Securities and Indebtedness.

(a) Change during the year in equity securities of the Corporation outstanding:

	Common	
	Shares	Stated Value
Balance December 31, 1978 (see Note 11 to Financial Statements on page 46)	85,567,163	$1,711,343,260
Shares issued under Dividend Reinvestment Plan—issued quarterly	1,188,899	23,777,980
Balance December 31, 1979	86,756,062	$1,735,121,240

(b) Increases and decreases during the year in indebtedness of the Corporation:

As reported on Form 10-Q for the quarter ended June 30, 1979, new debt issues were as follows:

(1) Obligations relating to Environmental Improvement Revenue Bonds of Fremont County, Wyoming, in the amount of $1.8 million were privately placed by Russell, Rea, Bleier &

Zappala (Division of Simpson, Emery & Co., Inc.). The proceeds will be used for air pollution control facilities to be installed at the Corporation's Atlantic City Ore Operations, Atlantic City, Wyoming. Registration was exempted under Section 3(a)(2) of the Securities Act of 1933. Net proceeds amounted to $1.79 million.

(2) Obligations relating to Environmental Improvement Revenue Bonds of the Allegheny County Industrial Development Authority, Pennsylvania, in the amount of $4.0 million were privately placed by Morgan Stanley & Co., Incorporated. The proceeds will be used for air pollution control facilities at the Corporation's Clairton Works. Registration was exempted under Section 3(a)(2) of the Securities Act of 1933. Net proceeds amounted to $3.975 million.

(3) Obligations relating to Environmental Improvement Revenue Bonds of the Industrial Development Board of the City of Fairfield, Alabama, in the amount of $6.5 million were privately placed by Morgan Stanley & Co., Incorporated. The proceeds will be used for air pollution control facilities at the Corporation's Fairfield Works. Registration was exempted under Section 3(a)(2) of the Securities Act of 1933. Net proceeds amounted to $6.460 million.

(4) The Corporation assumed the obligations of Uniroyal, Inc., relating to Environmental Improvement Revenue Bonds of the Parish of East Baton Rouge, Louisiana, in the amount of $2.0 million in connection with the acquisition of a chemical plant. The Corporation is the assignee of a lease of the pollution control facilities between Parish of East Baton Rouge, Louisiana, as lessor and Uniroyal, Inc., as lessee. These bonds were privately placed. The proceeds will be used for water pollution control facilities. Registration was exempted under Section 3(a)(2) of the Securities Act of 1933. Net proceeds amounted to $2.0 million.

(5) Obligations relating to Environmental Improvement Revenue Bonds of the City of Gary, Indiana, in the amount of $60.0 million were publicly placed by Morgan Stanley & Co., Incorporated. The proceeds will be used for air and water pollution control facilities at the Corporation's Gary Works. Registration was exempted under Section 3(a)(2) of the Securities Act of 1933. Net proceeds amounted to $59.303 million.

(6) Obligations relating to Environmental Improvement Revenue Bonds of the Allegheny County Industrial Development Authority, Pennsylvania, in the amount of $24.0 million were publicly placed by Morgan Stanley & Co., Incorporated. The proceeds will be used for air and water pollution control facilities at the Clairton Works, Homestead Works (Carrie Furnaces, Homestead Plant and Saxonburg Sinter Plant) and Edgar Thomson-Irvin Works (Vandergrift Plant) of the Corporation. Registration was exempted under Section 3(a)(2) of the Securities Act of 1933. Net proceeds amounted to $23.720 million.

(7) Miscellaneous increases in capital leases amounted to $4.6 million.

As reported on Form 10-Q for the quarter ended September 30, 1979, the decrease in debt was as follows:

The amount outstanding of the Corporation's class of convertible indebtedness (comprised solely of its 5-3/4% Convertible Subordinated Debentures Due 2001) has been decreased from $384.9 million, the amount outstanding as last previously reported, to $365.3 million, the amount outstanding as of September 30, 1979. The decrease results from the repurchase by the Corporation of $19.6 million principal amount of the Debentures for an aggregate cash consideration of $13.8 million.

7. Changes in Securities and Changes in Security for Registered Securities.

None.

8. Defaults upon Senior Securities.

None.

9. Approximate Number of Equity Security Holders.

Title of Class	Number of Record Holders
Common Stock	255,340 (December 31, 1979)
5¾% Convertible Subordinated Debentures Due 2001	3,091 (December 31, 1979)

10. Submission of Matters to a Vote of Security Holders.

Previously disclosed in Form 10-Q for the quarter ended June 30, 1979.

11. Idemnification of Directors and Officers.

Incorporated by reference to Annual Report on Form 10-K for the year 1977.

12. Financial Statements, Exhibits Filed and Reports on Form 8-K.

(a) Documents filed as part of this report.

(1) Financial statements and schedules of United States Steel Corporation and Subsidiary Companies. See separate index to financial statements on page 36.

(2) Exhibits.

— Form 11-K information required as to United States Steel Corporation Savings Fund Plan for Salaried Employees. Incorporated by reference to Post Effective Amendment No. 3 to Registration Statement No. 2-60914 on Form S-8 filed March 18, 1980.

— Letter from Price Waterhouse & Co. approving changes in accounting practices.

(b) Reports on Form 8-K. A report on Form 8-K was filed November 27, 1979, containing a response to item 5.

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

UNITED STATES STEEL CORPORATION,

By .... B.D. SMITH ....

B.D. SMITH

Vice President and Comptroller

March 18, 1980.

SUPPLEMENTARY INFORMATION ON CHANGING PRICES (Unaudited)

Financial Accounting Standard No. 33 was established in 1979. It requires two supplemental statements and explanations of certain financial data aimed at portraying the effect of general price level changes. Supplementary information of this type should be viewed with caution as it provides only a partial analysis. It does not reflect all of the relevant factors bearing on economic performance. However, for profitable businesses having plant, equipment or inventory acquired in prior years, statements of this type clearly demonstrate that reported profits, and hence reported taxes, are overstated.

INCOME ADJUSTED FOR CHANGES IN THE CONSUMER PRICE INDEX
For the Year Ended December 31, 1979

	(In millions)	
	As reported in Financial Statements	**Adjusted for Changes in Consumer Price Index (Average 1979 Dollars)**
Sales	$ 12,929.1	$ 12,929.1
Costs		
Cost of sales	10,705.3	10,812.1
Wear & exhaustion	531.5	859.7
All other	2,075.7	2,075.7
(Loss) before cumulative effect on prior years of changes in accounting principles	$ (383.4)	$ (818.4)
Gain from decline in purchasing power of net amounts owed		$ 283.3

Current year statement — The second column shows cost of sales and wear and exhaustion restated to reflect consumption of inventory and amortization of facilities at original cost adjusted for general inflation (based on the Consumer Price Index for All Urban Consumers). The disclosure rules preclude adjustments to the actual provision for taxes on income.

The gain from decline in purchasing power of net amounts owed indicates that the total liabilities requiring future fixed cash settlement could theoretically be repaid with dollars having a lesser value than at the beginning of the year. This represents a hypothetical and unrealized gain.

FIVE-YEAR COMPARISON OF SELECTED SUPPLEMENTARY FINANCIAL DATA ADJUSTED FOR CHANGES IN THE CONSUMER PRICE INDEX*

	All Dollars in Millions Except Per Share Amounts				
	1979**	1978	1977	1976	1975
Sales	$12,929.1	$12,293.5	$11,510.7	$10,975.7	$11,020.0
Cash dividends declared per common share	$ 1.58	$ 1.77	$ 2.62	$ 2.69	$ 2.52
Market price per common share at year-end	$ 16-1/2	$ 22-3/4	$ 36-3/4	$ 62	$ 56-3/4
Average Consumer Price Index (1967 = 100)	217.4	195.4	181.5	170.5	161.2

* The comparison restates financial data to average 1979 dollar values based on the Consumer Price Index for All Urban Consumers.

** Items required to be reported only for 1979 include (a) the loss before cumulative effect on prior years of changes in accounting principles $(818.4), and per common share $(9.51), (b) gain from decline in purchasing power of net amounts owed $283.3, and (c) net assets at year-end $10,033.6. The net assets reflect the net worth after general inflation adjustment to revalue inventory and net property, plant and equipment.

INDEX TO FINANCIAL STATEMENTS

All other schedules are omitted because they are not applicable or the required information is contained in the financial statements or the notes thereto.

Under the provisions of Instruction 1(b)(i) and (ii) of Instructions as to Financial Statements for Form 10-K, the individual financial statements and schedules of the registrant have been omitted.

Under the provisions of Instruction 5 of Instructions as to Financial Statements for Form 10-K, financial statements of unconsolidated subsidiaries, 50 percent owned persons or other persons have been omitted.

MANAGEMENT'S REPORT

The Corporation believes that the accompanying consolidated financial statements of United States Steel Corporation and Subsidiary Companies have been prepared in conformity with generally accepted accounting principles. They necessarily include some amounts that are based on best judgments and estimates. The financial information displayed in other sections of this Annual Report is consistent with that in the consolidated financial statements.

The Corporation seeks to assure the objectivity and integrity of its financial records by careful selection of its managers, by organizational arrangements that provide an appropriate division of responsibility and by communications programs aimed at assuring that its policies and methods are understood throughout the organization.

The Corporation has a comprehensive formalized system of internal accounting controls designed to provide reasonable assurance that assets are safeguarded and that its financial records are reliable. Appropriate management monitors the system for compliance, and the internal auditors independently measure its effectiveness and recommend possible improvements thereto. In addition, as part of their examination of the consolidated financial statements, the Corporation's independent public accountants, who are elected by the stockholders, review and test the internal accounting controls on a selective basis to establish a basis of reliance thereon in determining the nature, extent and timing of audit tests to be applied.

The Board of Directors pursues its oversight role in the area of financial reporting and internal accounting control through its Audit Committee. This committee, composed solely of non-management directors, regularly meets (jointly and separately) with the independent public accountants, management and internal auditors to monitor the proper discharge by each of its responsibilities relative to internal accounting controls and consolidated financial statements.

B. D. SMITH
Vice President and Comptroller

W. B. THOMAS
Executive Vice President—
Accounting and Finance

REPORT OF INDEPENDENT ACCOUNTANTS

TO THE STOCKHOLDERS OF
UNITED STATES STEEL CORPORATION:

We have examined the Consolidated Balance Sheet of United States Steel Corporation and Subsidiary Companies as of December 31, 1979 and December 31, 1978 and the related Statements of Income and Income Reinvested in Business and Statement of Changes in Financial Position for the years then ended. Our examinations of these statements were made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

The method of accounting for own engineering costs, blast furnace linings and interest costs was changed in 1979, as described in Note 21 to the financial statements.

In our opinion, the accompanying financial statements present fairly the financial position of United States Steel Corporation and Subsidiary Companies at December 31, 1979 and December 31, 1978 and the results of operations and changes in financial position for the years then ended in conformity with generally accepted accounting principles consistently applied during the period except for the changes, with which we concur, referred to in the preceding paragraph.

600 Grant Street
Pittsburgh, Pennsylvania 15219
February 12, 1980

PRICE WATERHOUSE & CO.

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in this Annual Report on Form 10-K of United States Steel Corporation for the year ended December 31, 1979 of our report dated February 4, 1980 on the 1979 and 1978 financial statements of the United States Steel Corporation Savings Fund Plan for Salaried Employees contained in Post Effective Amendment No. 3 to Registration Statement on Form S-8 filed March 18, 1980.

PRICE WATERHOUSE & CO.

600 Grant Street
Pittsburgh, Pennsylvania 15219
March 18, 1980

UNITED STATES STEEL CORPORATION

SUMMARY OF PRINCIPAL ACCOUNTING POLICIES

Principles applied in consolidation — Majority owned subsidiaries are consolidated, except for leasing and finance companies.

Investments — Investments in leasing and finance companies are at U. S. Steel's equity in the net assets plus advances to such companies. Investments in other companies, in which U. S. Steel has significant influence in the management and control, are also accounted for by the equity method. Marketable equity securities are at the lower of cost or market and other investments are at cost.

Inventories — Since 1941, the cost of inventories has been determined primarily under the last-in, first-out (LIFO) method which, in the aggregate, is lower than market.

Income recognition — Sales and related cost of sales are included in income when goods are shipped or services are rendered to the customer, except those related to construction projects which are accounted for on the completed contract method.

Property, plant and equipment — Generally, depreciation is computed on the straight-line method, based on estimated lives (usually the mid-point established under Guideline and Asset Depreciation Range systems). For the most part, depreciation expense is related to rates of operation, within a limited range.

Depletion of the cost of mineral properties is computed on the unit of production method based on estimated mineral reserves of the particular property.

For disposition of a plant or a major facility within a plant, the resultant gain or loss is reflected in income. Proceeds from other sales of facilities depreciated on a group basis are credited to the depreciation reserve. When facilities depreciated on an individual basis are sold, the difference between the selling price and the undepreciated cost is included in income.

Expenditures for renewals and betterments are capitalized. Costs of repairs and maintenance are expensed. The amortization of capital leases is included in Wear and exhaustion of facilities.

Mineral exploration and development — General prospecting costs are charged to expense as incurred. Exploration and development costs of domestic projects (except oil and gas) are expensed as incurred, but when projects are determined to be commercially feasible, these exploration costs are capitalized. Domestic oil and gas and foreign exploration and development costs are capitalized as incurred. If such projects are determined commercially unfeasible, these costs are expensed.

Pensions — Non-contributory pension provisions of the U. S. Steel Plan for Employee Pension Benefits cover substantially all employees and, in addition, participating salaried employees are also covered by the contributory pension provisions.

Pension costs under this plan are determined by an independent actuary based upon an acceptable actuarial method and various actuarial factors which, from time to time, are adjusted in light of actual experience. Pension costs reflect current service and a 25-year amortization of the frozen initial unfunded accrued liability. The funding policy provides that payments to the pension trusts shall be equal to the minimum funding requirements of ERISA plus additional amounts which may be approved from time to time.

Insurance — For the most part, U. S. Steel does not insure for property and casualty losses. Certain risks, including those required to be insured by law or contract and catastrophe casualty exposures, are insured. Costs resulting from non-insured losses are charged against income upon occurrence.

Deferred income taxes — These taxes result from recognizing certain items of income and expense in the consolidated financial statements in different years than they are recognized for income tax purposes.

Investment credit — Investment tax credits are recognized under the flow-through method whereby the provision for income taxes is reduced in the year these tax credits become allowable.

UNITED STATES STEEL CORPORATION

CONSOLIDATED STATEMENTS OF INCOME AND INCOME REINVESTED IN BUSINESS

	(In millions) 1979	1978
SALES	$12,929.1	$11,049.5
OPERATING COSTS		
Cost of sales (excludes items shown below) *(Note 18)*	10,705.3	9,046.4
Selling, general and administrative expenses	423.5	372.4
Pensions, insurance and other employee benefits *(Note 14)*	769.4	693.6
Wear and exhaustion of facilities	531.5	435.6
State, local and miscellaneous taxes	237.9	215.4
	12,667.6	10,763.4
OPERATING INCOME *(Excludes items shown below — Note 23)*	261.5	286.1
Interest, dividends and other income *(Note 18)*	196.0	155.3
Interest and other financing costs *(Note 18)*	(184.0)	(191.4)
INCOME BEFORE UNUSUAL ITEMS, TAXES ON INCOME AND CUMULATIVE EFFECT ON PRIOR YEARS OF CHANGES IN ACCOUNTING PRINCIPLES	273.5	250.0
UNUSUAL ITEMS		
Estimated provision for costs attributable to shutdown of facilities *(Note 19)*	(808.6)	—
Estimated provision for occupational disease claims *(Note 20)*	(88.1)	—
Revaluation of other investments *(Note 3)*	(53.2)	—
	(949.9)	—
INCOME (LOSS) BEFORE TAXES ON INCOME AND CUMULATIVE EFFECT ON PRIOR YEARS OF CHANGES IN ACCOUNTING PRINCIPLES	(676.4)	250.0
Provision (credit) for estimated United States and foreign income taxes *(Note 16)*		
Current	(6.3)	6.7
Deferred	(286.7)	1.3
	(293.0)	8.0
INCOME (LOSS) BEFORE CUMULATIVE EFFECT ON PRIOR YEARS OF CHANGES IN ACCOUNTING PRINCIPLES	(383.4)	242.0
Cumulative effect on prior years of changes in accounting principles *(Note 21)*	90.4	—
INCOME (LOSS)	$ (293.0)	$ 242.0
INCOME (LOSS) PER COMMON SHARE (in dollars) *(Note 13)*		
Primary:		
Income (loss) before cumulative effect on prior years of changes in accounting principles	$ (4.46)	$ 2.85
Cumulative effect on prior years of changes in accounting principles	$ 1.05	$ —
Income (loss)	$ (3.41)	$ 2.85
Fully diluted:		
Income (loss) before cumulative effect on prior years of changes in accounting principles	$ (4.46)	$ 2.78
Cumulative effect on prior years of changes in accounting principles	$ .98	$ —
Income (loss)	$ (3.41)	$ 2.78
PRO FORMA AMOUNTS ASSUMING ACCOUNTING CHANGES WERE APPLIED RETROACTIVELY		
Income (loss)	$ (383.4)	$ 256.5
Income (loss) per common share (in dollars)		
Primary	$ (4.46)	$ 3.02
Fully diluted	$ (4.46)	$ 2.94

	1979	1978
INCOME REINVESTED IN BUSINESS		
Balance at beginning of year	$ 3,518.8	$ 3,412.7
Income (loss)	(293.0)	242.0
	3,225.8	3,654.7
Less — Dividends on common stock $1.60 and $1.60 per share	137.5	135.9
Balance at end of year	$ 3,088.3	$ 3,518.8

UNITED STATES STEEL CORPORATION

CONSOLIDATED BALANCE SHEET

	(In millions) December 31 1979	1978
ASSETS		
Current Assets:		
Cash *(Note 1)*	$ 410.9	$ 377.6
Marketable securities, at cost (approximates market)	196.5	338.4
Receivables, less allowance for doubtful accounts of $13.9 and $15.2 (Schedule XII)	1,598.8	1,433.9
Inventories *(Note 2)*	1,250.5	1,257.0
Total Current Assets	3,456.7	3,406.9
Long-term receivables and other investments, less estimated losses of $6.1 and $32.3 *(Note 3)* (Schedule XII)	758.6	748.1
Property, plant and equipment, less accumulated depreciation of $7,064.9 and $7,208.6 *(Note 4)* (Schedules V & VI)	6,415.9	5,975.0
Operating parts and supplies	119.9	113.8
Costs applicable to future periods	278.8	292.5
Total Assets	$11,029.9	$10,536.3
LIABILITIES		
Current Liabilities:		
Notes payable *(Note 7)*	$ 195.2	$ 163.8
Accounts payable	971.4	827.7
Payroll and benefits payable	673.2	638.0
Accrued taxes *(Note 6)*	403.4	339.1
Long-term debt due within one year *(Note 8)*	44.5	74.5
Current portion of estimated provision for costs attributable to shutdown of facilities *(Note 19)*	123.1	—
Total Current Liabilities	2,410.8	2,043.1
Long-term debt, less unamortized discount *(Note 8)*	2,307.8	2,194.5
Deferred income taxes	162.8	416.8
Deferred credits and other liabilities *(Note 20)*	236.6	100.9
Estimated provision for costs attributable to shutdown of facilities *(Note 19)*	517.3	—
Redeemable preferred stock of consolidated subsidiary *(Note 9)*	500.0	500.0
Total Liabilities	6,135.3	5,255.3
OWNERSHIP EVIDENCED BY		
Common stock (par value $1 per share, authorized 150,000,000 shares) outstanding — 86,756,062 shares and 85,567,163 shares, stated at $20 per share *(Note 11)*	1,735.1	1,711.3
Capital in excess of stated value *(Note 11)*	71.2	70.0
Net unrealized loss on marketable equity securities *(Note 3)*	—	(19.1)
Income reinvested in business	3,088.3	3,518.8
Total Ownership	4,894.6	5,281.0
Total Liabilities and Ownership	$11,029.9	$10,536.3

4. Parents and Subsidiaries.

The following subsidiaries were 100% owned and were consolidated by the Corporation at December 31, 1979:

Name of subsidiary	State or other jurisdiction in which incorporated
A & G Transportation Company	Delaware
Alside, Inc.	Delaware
Bessemer and Lake Erie Railroad Company	Pennsylvania
Birmingham Southern Railroad Company	Alabama
Carnegie Natural Gas Company	Pennsylvania
Duluth, Missabe and Iron Range Railway Company	Minnesota
Elgin, Joliet and Eastern Railway Company	Illinois and Indiana
Essex Minerals Company	New Jersey
Lake Terminal Railroad Company, The	Ohio
McKeesport Connecting Railroad Company	Pennsylvania
Navios Corporation	Liberia
Navios Ship Management Services, Inc.	Liberia
Ohio Barge Line, Inc.	Pennsylvania
Orinoco Mining Company	Delaware
Pittsburgh & Conneaut Dock Company, The	West Virginia
Quebec Cartier Mining Company	Province of Quebec, Canada
River & Gulf Transportation Company	Delaware
Union Railroad Company	Pennsylvania
United States Steel International, Inc.	New Jersey
United States Steel International Sales Company	Delaware
USS Engineers and Consultants, Inc.	Delaware
USS Novamont, Inc.	Delaware
USS Oilwell Supply Co., Ltd.	Delaware
Warrior & Gulf Navigation Company	Delaware

The following subsidiaries were 100% owned and were not consolidated by the Corporation at December 31, 1979:

Name of subsidiary	State or other jurisdiction in which incorporated
Percy Wilson Mortgage and Finance Corporation	Delaware
U. S. Steel Credit Corporation	Delaware

The names of other subsidiaries, both consolidated and unconsolidated, have been omitted as these unnamed subsidiaries, considered in the aggregate as a single subsidiary, do not constitute a significant subsidiary.

5. Legal Proceedings.

During the past several years, the Department of Justice has served U. S. Steel with a number of Civil Investigative Demands relating to portions of its business. Documents are being, or have been, furnished pursuant to the terms of CID's relating to hot rolled sheet product (1977 and 1979), iron ore (1978) and oil country tubular goods (1979).

RMI Company, a partnership in which the Corporation owns a 50% interest, in April of 1979 entered a plea of *nolo contendere* to a September 28, 1978, criminal antitrust indictment, and a fine of $600,000 was entered against the company. Certain civil actions have been filed against RMI as the result of the criminal case, but the Corporation believes that any liability involved in such proceedings will not have a material adverse effect upon its financial position.

On February 29, 1980 the United States District Court for the Northern District of Ohio, Eastern Division, entered a preliminary injunction enjoining the Corporation from proceeding with the announced closing of the Youngstown (Ohio) Works pending the disposition of a lawsuit brought by employees at the Youngstown Works, and others, against the Corporation alleging the existence of a duty of the Corporation to continue to operate the Youngstown Works. The trial of this case is scheduled to begin on March 17, 1980.

UNITED STATES STEEL CORPORATION
NOTES TO FINANCIAL STATEMENTS

1. Cash — Included in cash are interest-bearing, short-term time deposits of $313.9 million and $312.4 million at December 31, 1979 and December 31, 1978, respectively.

2. Inventories —

	(In millions) December 31 1979	1978
Raw materials	$ 226.5	$ 169.2
Semi-finished products	401.8	511.7
Finished products	345.8	337.1
Supplies and sundry items	244.3	206.9
Construction contracts in progress	222.8	183.5
Less invoices rendered	(190.7)	(151.4)
Total	$1,250.5	$1,257.0

December 31, 1977 inventory balance was $1,254.8 million.

Under the LIFO method, current acquisition costs are estimated to exceed the inventory value at December 31, 1979 as shown above by approximately $2,100 million.

Included in Cost of sales and Income (Loss) Before Taxes On Income And Cumulative Effect On Prior Years Of Changes In Accounting Principles are estimated credits of $118.7 million in 1979 and $124.5 million in 1978 from LIFO inventory liquidations. Inventory quantity liquidations are a common and frequent occurrence in U. S. Steel and generally result from planned inventory programs to support changes in process technology, customer product specifications and market conditions, and because of the discontinuance of product lines.

The net of construction contracts in progress less invoices rendered includes $40.0 million in 1979 and $43.5 million in 1978 related to contracts for which cumulative costs exceed cumulative invoices rendered and $(7.9) million in 1979 and $(11.4) million in 1978 applicable to contracts for which cumulative invoices rendered exceed cumulative costs.

3. Long-Term Receivables and Other Investments —

	(In millions) December 31 1979	1978
Receivables due after one year	$ 88.9	$104.2
Trusteed funds for environmental improvements	308.0	283.8
Other trusteed funds and statutory deposits	39.7	38.9
Investments:		
Wholly owned leasing and finance companies—equity method	48.3	42.7
Partnership interests	26.6	24.5
Other partially owned companies—		
Equity method	184.1	184.0
Cost method	34.9	37.4
Other	28.1	32.6
Total	$758.6	$748.1

Income from investments accounted for by the equity method amounted to $31.7 million in 1979 and $15.6 million in 1978 and dividends received in 1979 and 1978 were $4.4 million and $6.3 million, respectively. Geographic areas and industries in which equity companies operate are shown on pages 9, 10 and 11.

U. S. Steel's investment in an inactive partially owned company accounted for under the equity method was written down to a nominal value in 1979. This resulted in a $19.4 million charge to pre-tax income.

UNITED STATES STEEL CORPORATION

NOTES TO FINANCIAL STATEMENTS (continued)

Investments in partially owned companies (cost method) include marketable equity securities of $2.9 million for 1979 and $7.1 million for 1978. Cost exceeded market value by $33.8 million at December 31, 1979 and $27.4 million at December 31, 1978. In 1979 management concluded that the value of the marketable equity security was permanently impaired and charged pre-tax income with the writedown to market value. In 1978 the decline in market value had been considered temporary and the excess of cost over market value was credited to the investment and an unrealized loss, net of deferred tax, was reflected in stockholders' equity.

Guarantees by U. S. Steel of the liabilities of other companies, most of which are accounted for by the equity method, were $330.3 million at December 31, 1979 and $205.7 million at December 31, 1978.

4. Property, Plant and Equipment —

	(In millions) December 31	
	1979	1978
Land	$ 302.5	$ 293.1
Buildings	1,445.4	1,451.4
Machinery & equipment	11,616.9	11,342.5
Capital leases—machinery & equipment	116.0	96.6
Total (at cost)	13,480.8	13,183.6
Less accumulated depreciation:		
Buildings	695.0	703.6
Machinery & equipment	6,321.0	6,469.0
Capital leases—machinery & equipment	48.9	36.0
Total	7,064.9	7,208.6
Net	$ 6,415.9	$ 5,975.0

Depreciable lives are at the midpoint under the IRS Asset Depreciation Range System: primary metals — 18 years for additions prior to 1979 and 15 years subsequent thereto; chemicals — 11 years for additions prior to 1979 and 9.5 years subsequent thereto; mining — 10 years; etc. Building lives average 40 years.

5. Capital Authorizations — At December 31, 1979, the estimated amount required to complete authorized projects for property, plant and equipment was $1,030 million. Refer to Note 17 for information regarding contingencies related to environmental and safety laws.

6. Accrued Taxes — Details of accrued taxes at December 31, were as follows:

	(In millions)	
	1979	1978
Income taxes—Current	$287.8	$243.4
—Deferred	(42.3)	(47.5)
Other taxes	157.9	143.2
Total	$403.4	$339.1

7. Notes Payable — Notes payable at December 31, 1979 includes $38.8 million payable to an unconsolidated subsidiary at 16.25% interest. All other notes were payable to banks (principally demand basis) and had average interest rates at year-end of 12.2% for 1979 and 10.2% for 1978.

	($ millions)	
	1979	1978
Maximum aggregate amount at any month-end	$195.2	$167.4
Weighted daily average:		
Borrowing	$175.0	$164.0
Interest rate*	11.1%	8.0%

*Computed by relating interest expense to average daily borrowing.

8. Long-Term Debt — A summary of long-term debt, except for leasing and finance companies, outstanding at December 31, is as follows:

	Interest Rates	Years of Maturity	(In millions) 1979	1978
United States Steel Corporation				
Sinking Fund Debentures (callable) (a) ..	4	1983	$ 52.2	$ 54.9
Sinking Fund Debentures (callable) (b) ..	4-1/2	1986	59.3	74.0
Sinking Fund Debentures (callable) (c) ..	7-3/4	2001	124.5	130.5
Subordinated Debentures (callable) (sinking fund began 1976) (d)	4-5/8	1996	403.4	437.6
Convertible Subordinated Debentures (callable) (e)	5-3/4	2001	360.7	384.9
Obligations relating to Industrial Development and Environmental Improvement Bonds and Notes	4-1/5 – 8-1/10	1980-2009	742.4	602.3
Notes payable to others (f)	7-3/8 – 9	1980-1995	256.4	262.0
Mortgages, purchase money obligations and contracts	3-1/2 – 10-1/4	1980-2002	8.3	21.7
Capital lease obligations		1980-2007	42.4	46.4
Consolidated subsidiaries				
Obligations relating to Industrial Development Bonds	5-1/2 – 11-1/10	1981-1989	65.4	67.4
Railroads First Mortgage Bonds (callable)	2-7/8 – 3	1980-1996	3.9	7.2
Notes payable to banks	3 – 16-3/10	1980-1989	122.4	135.2
Notes payable to others	5-1/2 – 9-1/2	1980-1994	59.6	—
Mortgages, purchase money obligations and contracts	5-3/4 – 15-1/2	1980-2002	32.9	39.7
Capital lease obligations		1980-1989	30.9	19.2
Total (g)			2,364.7	2,283.0
Less unamortized discount (h)			12.4	14.0
			2,352.3	2,269.0
Less amount due within one year			44.5	74.5
Long-term debt due after one year ..			$2,307.8	$2,194.5

U. S. Steel has no immediate plans of utilizing $265 million of existing bank lines of credit.

(a) to (e) Sinking fund provisions require annual sinking fund payments sufficient to redeem:

(a) $15 million principal amount of debentures on each July 15, from 1980 to 1982, inclusive ($22.8 million repurchased and held by the Corporation);

(b) $15 million principal amount of debentures on each April 15, from 1980 to 1985, inclusive ($45.7 million repurchased and held by the Corporation);

(c) $7.5 million principal amount of debentures on each March 1, from 1982 to 2000, inclusive ($25.5 million repurchased and held by the Corporation);

(d) $20 million principal amount of debentures on each January 1, from 1980 to 1995, inclusive ($139.4 million repurchased and held by the Corporation);

(e) $20 million principal amount of debentures on each July 1, from 1987 to 2000, inclusive ($39.3 million repurchased and held by the Corporation); convertible into common stock at $62.75 per share.

(f) Includes $100 million 8-1/4% note which matures 1986-1995 and a $150 million 7-3/8% note which matures 1985-1987, both of which were privately placed with financial institutions.

(g) Required payments of long-term debt for the years 1981-1984 are $47.0 million, $63.6 million, $122.8 million and $73.5 million.

(h) Unamortized discount (principally on 4-5/8% Subordinated Debentures) is being amortized over the lives of the related debt.

9. Redeemable Preferred Stock of Consolidated Subsidiary — Quebec Cartier Mining Company (QCM) has outstanding, 5,000,000 shares of U. S. $100 par, non-voting, floating rate, cumulative, redeemable preferred stock. Two and one-half million of these shares were issued in 1977 and a like amount in 1978. This financing allowed QCM to replace substantial amounts of its existing long-term debt at a lower carrying cost and also to provide financing for current expenditures.

Shares may be tendered at specified series installment dates from 1982 through 1985 in the amounts of $125.0 million, $208.3 million, $83.3 million and $83.4 million, respectively, and if tendered, must be purchased by QCM at par plus accrued interest. These shares are redeemable at any time by QCM. U. S. Steel has agreed that upon the happening of certain stated events, it will, upon tender by any holder, purchase such shares at par plus 200% of accrued and unpaid dividends.

Quarterly dividends, charged to Interest and other financing costs, were paid based on annual floating rates ranging from 5.90% to 7.04% in 1979 and 4.71% to 5.52% in 1978.

10. Preferred Stock — U. S. Steel is authorized to issue 20,000,000 shares of preferred stock, without par value. At December 31, 1979, none of this stock had been issued.

11. Common Stock — At December 31, 1979, the status of authorized shares of common stock reserved for specific purposes was as follows:

	Shares Reserved	Shares Issued To Date
Conversion of convertible subordinated debentures	6,374,502	—
Dividend reinvestment plan	6,000,000	3,380,892
Savings fund plan	4,000,000	2,120,977
1976 stock option incentive plan	3,000,000	—
Total	19,374,502	5,501,869

Shares issued at market prices under the Corporation's Dividend Reinvestment Plan were 1,188,899 in 1979 and 851,262 in 1978. In 1978 the Savings Fund Plan purchased 546,502 reserved shares. However, commencing in May 1978, the Savings Fund Plan began purchasing shares on the open market. As a result of the above issuances, capital in excess of stated value increased by $1.2 million in 1979 and $8.9 million in 1978.

12. Stock Option Incentive Plan — The 1976 Stock Option Incentive Plan was approved by stockholders on May 3, 1976. Under this plan, the Compensation Committee of the Board of Directors may grant to key management employees options to purchase, in the aggregate up to 3,000,000 shares, unissued or reacquired common stock at not less than 100% of market value at date of grant. Options are exercisable after one year, but not to exceed ten years, from date of grant. The Compensation Committee may authorize the surrender of the right to exercise an option or portion thereof in exchange for an amount of stock and/or cash equal to the excess of the fair market value at the time of surrender over the aggregate option price of such shares. Unoptioned shares available at December 31, 1979 were 838,600 and at December 31, 1978 were 1,352,600. No options have been exercised or surrendered through 1979. Transactions during 1979 and 1978 were as follows:

	Number Shares	Option Price Per Share	Value at Date of Grant (In millions)
Shares under option 12/31/77	1,113,000	$38.8125-53.50	$51.3
Granted 5/30/78	543,900	28.875	15.7
Canceled in 1978	(9,500)	28.875-53.50	(.4)
Shares under option 12/31/78	1,647,400	28.875-53.50	66.6
Granted 5/29/79	563,000	22.3125	12.6
Canceled in 1979	(49,000)	22.3125-53.50	(1.8)
Shares under option 12/31/79	2,161,400	22.3125-53.50	$77.4

The market price per share at date options became exercisable was $21-7/8 for 539,400 shares exercisable in 1979 and $26-5/8 for 559,000 shares exercisable in 1978.

13. Income Per Common Share — Primary income per common share is based on the weighted average number of common shares outstanding which was 86,030,306 in 1979 and 84,961,076 in 1978.

Fully diluted income per share assumes full conversion of the 5-3/4% convertible subordinated debentures outstanding. In 1979, the conversion of these convertible debentures was excluded from computation of fully diluted income per share because of anti-dilutive effects. In 1978, the income for computation of primary income per share was adjusted by $11.6 million for assumed reduction of interest and other related costs of these debentures. The weighted average number of shares used to compute fully diluted income per share was 91,095,738.

14. Pension Costs — The provision for costs of pension plans administered by United States Steel and Carnegie Pension Fund was $353.5 million in 1979 and $331.7 million in 1978. The 1979 cost excludes pension costs attributable to shutdown of facilities. The increase in costs resulted principally from higher payrolls coupled with an increase in non-contributory pension benefits negotiated in 1977.

In addition, for certain other employees, U. S. Steel made provision of approximately $36 million in 1979 and $32 million in 1978 for multi-employer retirement benefit plans and other pension plans qualified under the laws of the countries involved.

Pension trust assets for the U. S. Steel Plan are valued for actuarial purposes on a 5-year moving average of quarterly market values for quoted securities and at estimated current value for other assets. The actuarially computed value of (a) vested benefits as estimated at December 31, 1979 exceeded the average value of trust assets by approximately $1.0 billion and (b) the unfunded accrued liability was approximately $1.3 billion at December 31, 1979.

15. Lease Commitments — At December 31, 1979, U. S. Steel's future total minimum lease payments and the present value of net minimum capital lease payments were:

	(In millions) Capital Leases	Operating Leases
1980	$ 20.3	$ 59.5
1981	16.9	48.0
1982	14.0	38.6
1983	14.1	31.3
1984	12.0	32.3
Later years	58.7	178.2
Sublease rentals (decrease)	—	(3.6)
Total minimum lease payments	136.0	$ 384.3
Less: Estimated executory costs	26.1	
Net minimum lease payments	109.9	
Less: Imputed interest costs	36.6	
Present value of net minimum lease payments included in long-term debt	$ 73.3	

As to operating leases, approximately 74% of such rentals involve vessel charters, 15% railway equipment leases and the balance covers a variety of facilities and equipment. Most long-term vessel charters and railway equipment leases include purchase options.

Total rental expense for operating leases amounted to $88.4 million in 1979 and $91.0 million in 1978 including reduction of sublease rentals of $1.3 million in 1979 and $1.0 million in 1978. The non-cancelable lease portion amounted to $56.7 million in 1979 and $62.1 million in 1978 of which $52.3 million and $57.8 million, respectively, represented minimum rentals.

16. Tax Provision — The provision (credit) for estimated United States and foreign taxes on income was:

	(In millions) 1979	1978
Currently payable (refundable):		
U. S. Federal		
Current year	$ .2	$ 20.8
Operating loss carryback effects	(26.7)	(34.9)
Adjustment of prior years	(4.1)	(1.9)
	(30.6)	(16.0)
U. S. State and Local	9.9	8.0
Foreign	14.4	14.7
Total	(6.3)	6.7
Deferred:		
U. S. Federal	(294.5)	(1.3)
U. S. State and Local	1.2	2.0
Foreign	6.6	.6
Total	(286.7)	1.3
Total provision (credit)	$(293.0)	$ 8.0

The components of the deferred tax provision (credit) resulting from timing differences were:

	(In millions)	
	1979	1978
Depreciation	$ 130.5	$ 107.3
Investment credit	(10.6)	(119.9)
Interest costs	.2	24.7
Unremitted earnings of foreign consolidated subsidiaries	15.7	2.3
Intercompany profit in inventory	2.1	3.9
Estimated provision for shutdown of facilities	(354.1)	—
Estimated provision for occupational disease claims	(49.3)	—
Revaluation of other investments	(14.2)	—
Reduction of deferred taxes resulting from operating loss	(20.0)	—
Adjustment of prior years	2.4	(24.5)
Other	10.6	7.5
Total deferred tax provision (credit)	$(286.7)	$ 1.3

The primary reasons that the provision (credit) for income taxes differs from the amount computed by applying the basic Federal income tax (FIT) rates to Income (Loss) Before Taxes On Income And Cumulative Effect On Prior Years Of Changes In Accounting Principles are as follows:

	(In millions)	
	1979	1978
U. S. statutory rate (1979—46%; 1978—48%) applied to income (loss) before tax	$(311.1)	$ 120.0
Investment credit	—	(81.2)
Excess wear and exhaustion	(44.3)	(26.3)
Unremitted earnings of certain foreign subsidiaries	4.3	9.8
Minimum income tax	1.0	12.1
Foreign income taxes	5.8	5.6
State and local income taxes after FIT benefit	6.0	5.6
Adjustment of prior years	(1.7)	(26.4)
Operating loss limitation	45.6	—
Other	1.4	(11.2)
Total provision (credit)	$(293.0)	$ 8.0

As a result of an operating loss, $3.0 million of investment credit recognized in previous years was reversed in 1979 and in addition, $66.4 million of current year investment credit was unused in determining the tax provision for 1979. The unused investment credits expire in 1985 and 1986 respectively.

The 1979 tax provision includes a $46.8 million deferred tax credit offset to the tax effect on prior years changes in accounting principles as a result of the 1979 loss carryback.

At December 31, 1979, for financial reporting purposes, U. S. Steel had an unused operating loss carryforward of $113 million and for tax reporting purposes, there was an unused 1979 net operating loss carryforward of $142 million which expires in 1986.

The U. S. income tax liabilities for all tax years prior to 1964 have been paid except for an additional $15.6 million assessment applicable to 1957-1960 involving an issue which has been appealed to the U. S. Court of Appeals for the Second Circuit. The government has also filed an appeal for those years, which would increase the assessment to $18.5 million. A suit for refund of $20.0 million in taxes and interest has been filed with the U. S. Court of Claims for the years 1962-1963 on an issue on which the Corporation expects a favorable decision. The tax years 1964-1975 are in various stages of audit or administrative review. The Corporation believes it has made adequate provision for income taxes and any interest which may become payable on account of those years not yet settled.

U. S. income taxes have not been provided on unremitted earnings of a foreign subsidiary, as these earnings are considered to be permanently invested by the subsidiary. On a consolidated basis, the earnings totaled $93.4 million through 1979.

17. Contingencies — Many uncertainties exist concerning the capital requirements of and operating costs associated with the implementation of environmental and safety laws. These government-imposed requirements stem from various legislative enactments including the Federal Water Pollution Control Act, the Federal Clean Air Act, the Resource Conservation and Recovery Act, the Toxic Substances Control Act, the Occupational Safety and Health Act, the Coal Mine Health & Safety Act, and the Surface Mining Control and Reclamation Act. In some instances, regulations have not been issued, performance standards have not been established, and equipment requirements have not been defined. In other areas, administrative or judicial proceedings are pending to clarify or establish the extent and type of facilities or facility modifications required for compliance.

Predictions beyond 1980 can only be broad-based estimates by the Corporation, in many cases without any detailed engineering or other documentary support. Such estimates indicate requirement for expenditures for bringing into compliance with the above mentioned legislative requirements those existing facilities which are currently expected to be economically operational ranging from $1,370 million to $1,920 million through 1984 (in 1979 dollars, and includes capitalization of own engineering and interest costs). These estimates assume (a) only minor changes in operating procedures, (b) no process changes and (c) compliance by all Corporation facilities with such environmental and safety laws and regulations, as presently enforced. The economics of the required investment may dictate that certain facilities be abandoned instead of modified to comply with the requirements. The substantial sums required for these non-income generating expenditures will restrict the ability of the Corporation to continue to modernize and expand its facilities. To preclude a negative impact upon the Corporation's earnings in future years, unless there is a substantial increase in productivity, the costs associated with compliance with all these regulations will have to be recovered through cost-covering price increases, market conditions permitting.

The outcome of pending and potential administrative and judicial proceedings, as well as future legislative and regulatory changes, will be significant factors in determining the specific amount of expenditures required for this purpose and the periods of time for achieving legislatively established goals. Federal laws and regulations provide for the assessment of substantial civil penalties for noncompliance with environmental requirements under specified circumstances. It is not possible at this time to estimate the specific amount of such penalties that might be assessed against U. S. Steel or the outcome of any pending or future proceeding in which penalties are sought. However, it is not anticipated that the outcome of such proceedings should result in a material adverse effect upon the consolidated net worth of U. S. Steel.

18. Other Items — *Operating costs*: Maintenance and repairs of plant and equipment totaled $1,672.8 million in 1979 and $1,417.8 million in 1978.

Real estate and personal property taxes totaled $114.0 million in 1979 and $112.0 million in 1978.

Research and development costs totaled $56.6 million in 1979 and $52.5 million in 1978.

Interest, dividends and other income: Gains resulting from the repurchase of debt securities, primarily to satisfy sinking fund requirements, amounted to $23.2 million in 1979 and $35.6 million in 1978. In 1978, a profit of $11.7 million was realized from the sale of U. S. Steel's investment in FLO-CON Systems.

Interest and other financing costs: Expenses included in this account were as follows:

	(In millions)	
	1979	1978
Interest on debt — incurred	$ 173.3	$157.5
Less interest capitalized *(Note 21)*	21.7	—
Net interest expense	151.6	157.5
Redeemable preferred stock dividend of QCM *(Note 9)*	32.8	22.1
Foreign exchange losses (gains) related to debt	(1.3)	9.1
Other	.9	2.7
Total	$ 184.0	$191.4

Other: The aggregate foreign exchange loss (gain) included in income was $(5.5) million in 1979 and $16.1 million in 1978.

In June 1979, U. S. Steel purchased all the common stock of Novamont Corporation, a member of the Montedison Group, for $72.8 million. The newly acquired subsidiary is included in the Chemicals segment as USS Novamont, Inc.

Incentive compensation: In May 1974 the stockholders approved an incentive compensation plan covering key executives and the plan was amended in May 1979. The aggregate amount available for annual awards under this plan (as amended) shall not exceed .75% of income after provision for taxes on income for any year. No annual awards were made for 1979; annual awards totaled $1.0 million for 1978.

19. Estimated Provision for Costs Attributable to Shutdown of Facilities — During the fourth quarter 1979, U. S. Steel announced the permanent shutdown of several steel and nonsteel plants and manufacturing facilities which will be disposed of in accordance with a formal approved plan. These shutdowns resulted in a charge against pre-tax income in 1979 of $808.6 million, a minor portion of which was paid out in 1979. A significant portion represents long-term liabilities for employee related costs to be paid out in later years. Most of the related tax benefits should be realized in the future.

These shutdown costs were estimated as follows:

	(In millions)
Employee related costs (Includes pensions, insurance, severance, unemployment benefits, etc.)	$413.3
Writedown of facilities to estimated recoverable value	218.7
Estimated operating results during shutdown period	176.6
Total	$808.6

20. Estimated Provision for Occupational Disease Claims — Amendments, effective in 1978, to the Federal Coal Mine Health and Safety Act of 1969, together with administrative actions, have resulted in a dramatic increase during 1979 in claims for alleged pneumoconiosis (Black Lung) from former employees. An estimated accrual of $88.1 million was provided in 1979 for potential awards. Commencing in 1979, a provision for future claims is being accrued over the remaining service life of present employees and is reflected in Pensions, insurance, and other employee benefits.

21. Changes in Accounting Principles — Prior to 1979, U. S. Steel's own engineering costs associated with capital projects were charged to cost in the year incurred. In 1979, to better reflect its total investment in facilities and to achieve a better matching of expense with revenue, the Corporation began capitalizing these engineering costs and depreciating them as part of the asset acquired. This treatment parallels the accounting for outside engineering services for capital projects.

Blast furnace linings, which are normally replaced on a six-year cycle, had been charged to operations at the time of relining. Furthermore, advancing technology and increases in size of furnaces could result in longer lining lives and greater reline costs. Therefore, to better reflect its investment in facilities and to achieve a better matching of expense with revenue, in 1979 the Corporation capitalized these reline costs and is amortizing them over the estimated life of the linings.

These changes are considered by management and concurred in by its independent accountants to be preferred accounting practices. The prior years' cumulative effect increased income by $90.4 million net of $69.0 million related income taxes. Approximately 71% of this effect resulted from capitalization of own engineering costs and 29% from capitalization of blast furnace lining costs. The current year effect of these two changes was to increase 1979 pre-tax income by $21.0 million.

U. S. Steel adopted in 1979 Financial Accounting Standard No. 34, Capitalization of Interest Cost. This standard requires capitalization of an interest cost as part of the historical cost of qualifying assets that require a period of time to get them ready for their intended use. The standard specifies prospective application and therefore there is no cumulative effect on prior years. See Note 18 for current year effect.

22. Quarterly Financial Data (Unaudited) —

(In millions except per share data)

	1979				1978			
	4th Qtr.[a]	3rd Qtr.[a]	2nd Qtr.[a]	1st Qtr.[a]	4th Qtr.	3rd Qtr.	2nd Qtr.	1st Qtr.
Sales	$3,031.9	$3,225.0	$3,606.5	$3,065.7	$2,955.4	$2,788.0	$2,878.2	$2,427.9
Cost of sales	2,642.9	2,652.1	2,881.3	2,529.0	2,379.7	2,265.9	2,284.0	2,116.8
Provision (credit) for income taxes	(369.0)	—	57.0	19.0	29.0	(9.0)	21.0	(33.0)
Income (loss)[e]	(668.9)[b]	88.2	150.4	137.3[d]	94.6	88.8	117.3	(58.7)
Per share data:								
Primary income[e]	$ (7.74)	$ 1.02	$ 1.75	$ 1.60[d]	$ 1.11	$ 1.04	$ 1.38	$ (.70)
Fully diluted income[e]	(7.74)[f]	.99	1.67	1.53[d]	1.07	1.00	1.32	(.70)[f]
Dividends paid	.40	.40	.40	.40	.40	.40	.40	.40
Price range of common stock[c]								
—Low	16-3/4	21-1/4	21-3/8	21-1/2	21-1/8	25	24-7/8	25
—High	24-1/2	24-3/8	24-3/4	26-1/8	28-3/8	30-1/4	30-5/8	32-7/8

(a) Restated for changes in accounting principles (Note 21). Prior years effect of $90.4 million is included in 1st quarter 1979.

(b) Includes $(949.9) million for unusual items (Notes 3, 19 and 20).

(c) Composite tape.

(d) Data on changes in accounting principles — first quarter 1979:

		Income Per Share	
	Amount	Primary	Fully Diluted
Income before cumulative effect on prior years of changes in accounting principles	$ 46.9	$ .55	$ .54
Cumulative effect on prior years of changes in accounting principles	90.4	$1.05	$ .99
Income	$137.3	$1.60	$1.53

(e) Comparative data on changes in accounting principles:

	1979				1978			
	4th Qtr.	3rd Qtr.	2nd Qtr.	1st Qtr.	4th Qtr.	3rd Qtr.	2nd Qtr.	1st Qtr.
Data as previously reported:								
Income (loss)	$(561.7)	$81.3	$145.4	$42.0	$94.6	$88.8	$117.3	$(58.7)
Income (loss) per common share —								
primary	(6.50)	.94	1.69	.49	1.11	1.04	1.38	(.70)
fully diluted	(6.50)[f]	.91	1.61	.49[f]	1.07	1.00	1.32	(.70)[f]
Pro forma amounts assuming accounting changes were applied retroactively:								
Income (loss)	$(668.9)	$88.2	$150.4	$46.9	$98.6	$91.8	$121.1	$(55.0)
Income (loss) per common share —								
primary	(7.74)	1.02	1.75	.55	1.15	1.08	1.43	(.65)
fully diluted	(7.74)[f]	.99	1.67	.54	1.11	1.04	1.36	(.65)[f]

(f) Conversion of convertible debentures excluded from fully diluted computation because of anti-dilutive effects.

23. Industry Segment & Geographic Area Information (In millions)

By Industry Segment: (1976 and 1975 Unaudited)

	Sales: Unaffiliated Customers	Sales: Between Segments	Sales: Total	Operating Income (Loss)(2)	Identifiable Assets	Wear and Exhaustion	Capital Expenditures
Steel Manufacturing:(1)							
1979	$ 9,022.5	$ 731.1	$ 9,753.6	$ (102.5)(3)	$ 5,890.2	$ 375.2	$ 524.3
1978	8,135.6	684.5	8,820.1	25.5	5,736.7	316.7	395.2
1977	7,021.7	553.8	7,575.5	(59.9)	5,514.8	265.7	599.0
1976	6,313.4	522.1	6,835.5	145.0	5,121.0	228.2	659.0
1975	5,815.6	607.2	6,422.8	272.5	—	—	—
Chemicals:							
1979	$ 1,207.1	$ 48.5	$ 1,255.6	$ 57.9	$ 794.3	$ 44.2	$ 280.5
1978	763.1	44.7	807.8	21.0	457.3	23.6	100.0
1977	664.5	35.4	699.9	32.7	353.6	17.5	67.5
1976	609.3	38.8	648.1	62.4	270.8	16.1	49.9
1975	621.6	34.1	655.7	124.8	—	—	—
Resource Development:							
1979	$ 433.3	$ 143.0	$ 576.3	$ 55.4	$ 1,066.9	$ 48.8	$ 78.7
1978	271.1	124.9	396.0	25.1	1,085.7	41.3	54.1
1977	242.1	143.4	385.5	26.3	1,057.8	38.0	65.0
1976	198.9	160.2	359.1	68.5	1,063.6	23.8	143.7
1975	247.1	106.2	353.3	69.3	—	—	—
Fabricating & Engineering and Other:(1)							
1979	$ 2,040.7	$ 292.1	$ 2,332.8	$ 90.7	$ 1,105.9	$ 38.3	$ 53.5
1978	1,705.9	264.6	1,970.5	88.1	1,029.2	35.2	33.8
1977	1,545.7	272.3	1,818.0	95.4	870.8	34.8	39.3
1976	1,357.7	307.6	1,665.3	163.9	845.5	24.2	48.6
1975	1,367.1	222.1	1,589.2	192.9	—	—	—
Domestic Transportation & Utility Subsidiaries:							
1979	$ 225.5	$ 437.6	$ 663.1	$ 152.2	$ 743.6	$ 25.8	$ 42.0
1978	173.8	374.7	548.5	119.9	713.1	19.5	84.7
1977	135.9	310.4	446.3	71.3	630.2	16.4	93.9
1976	128.5	317.6	446.1	81.3	562.8	15.0	56.1
1975	119.9	259.5	379.4	55.7	—	—	—
Corporate Assets, Adjustments & Eliminations:(1)							
1979	$ —	$(1,652.3)	$ (1,652.3)	$ 7.8	$ 1,429.0	$ (.8)	$ —
1978	—	(1,493.4)	(1,493.4)	6.5	1,514.3	(.7)	—
1977	—	(1,315.3)	(1,315.3)	9.7	1,487.2	(.4)	—
1976	—	(1,346.3)	(1,346.3)	3.4	1,304.2	1.3	—
1975	—	(1,229.1)	(1,229.1)	(11.0)	—	—	—
Total Consolidated:							
1979	$12,929.1	$ —	$12,929.1	$ 261.5(3)	$11,029.9	$ 531.5	$ 979.0
1978	11,049.5	—	11,049.5	286.1	10,536.3	435.6	667.8
1977	9,609.9	—	9,609.9	175.5	9,914.4	372.0	864.7
1976	8,607.8	—	8,607.8	524.5	9,167.9	308.6	957.3
1975	8,171.3	—	8,171.3	704.2	8,155.0	297.2	787.4

(1) Years 1978-1975 restated to reflect transfer of steel service center operations from Steel Manufacturing segment to Fabricating & Engineering and Other.

(2) For exclusions see "General".

(3) The current year effects of accounting changes (Note 21) included in Steel Manufacturing Operating Income (Loss) was $20.4 million. The effects on other segments were immaterial.

By Geographic Areas: (1976 Unaudited)

	Sales			Operating	
	To Unaffiliated Customers	Transfers Between Geographic Areas	Total	Income (Loss)	Identifiable Assets
United States (Domestic):					
1979	$12,335.6	$ 20.3	$12,355.9	$169.2	$ 8,433.7
1978	10,642.6	15.6	10,658.2	239.0	7,943.9
1977	9,205.5	13.1	9,218.6	105.7	7,404.1
1976	8,369.0	7.7	8,376.7	428.8	6,835.9
North America (Excl. U.S.):					
1979	$ 417.6	$ 135.9	$ 553.5	$ 82.7	$ 984.2
1978	259.5	122.6	382.1	40.8	947.5
1977	254.2	145.0	399.2	56.6	909.8
1976	225.8	176.2	402.0	88.9	1,009.7
Other Foreign:					
1979	$ 175.9	$ 6.6	$ 182.5	$ 1.8	$ 138.3
1978	147.4	5.5	152.9	(.2)	130.6
1977	150.2	3.6	153.8	3.5	113.3
1976	13.0	—	13.0	3.4	18.1
Corporate Assets, Adjustments & Eliminations:					
1979	$ —	$ (162.8)	$ (162.8)	$ 7.8	$ 1,473.7
1978	—	(143.7)	(143.7)	6.5	1,514.3
1977	—	(161.7)	(161.7)	9.7	1,487.2
1976	—	(183.9)	(183.9)	3.4	1,304.2
Total Consolidated:					
1979	$12,929.1	$ —	$12,929.1	$261.5	$11,029.9
1978	11,049.5	—	11,049.5	286.1	10,536.3
1977	9,609.9	—	9,609.9	175.5	9,914.4
1976	8,607.8	—	8,607.8	524.5	9,167.9

General

Intersegment sales and transfers, for the most part, are accounted for at commercial prices. Steel Manufacturing transfers of coal chemical by-products to the Chemicals segment reflect the current value of the raw by-product material as a replacement for purchased fuels plus the costs incurred to convert the raw material to the transferred product.

Operating income for 1979 does not include those costs included in Unusual Items, which by nature are ordinarily considered operating expenses. These costs are:

	(In millions)
Employee related costs included in provision for shutdown of facilities (Steel Mfg. $339.4, Other $73.9)	$413.3
Other costs included in provision for shutdown of facilities (Steel Mfg. $352.5, Other $63.9)	416.4
Estimated provision for occupational disease claims (Steel Mfg.)	88.1
Total	$917.8

In addition, operating income does not include revaluation of investments; profit or loss from the sale of investments and property, plant and equipment; equity in the income of unconsolidated investees; dividend and interest income on marketable securities and other outside investments; interest and other financing costs; and income taxes and other items considered to be general corporate income or expense. Selling, general and administrative expenses have been allocated to segments.

Corporate Assets consist largely of cash, notes receivable, marketable securities and other investments.

Export sales from domestic operations were not material. U. S. Steel has no single customer from which it derives 10 percent or more of its revenue.

Steel Manufacturing

Includes domestic iron ore, coal and limestone operations integrated with steel plants which produce and sell a wide range of steel mill products. Also included are the Great Lakes transportation operations, principally involving the movement of ore and limestone to steel plants, and sales of steel mill products by export distributors. Some of the steel mill products are sold to other industry segments of U. S. Steel for further processing and fabrication.

Chemicals

Includes the production and marketing of various industrial and coal chemicals, petrochemicals, polyolefin & styrenic plastics and agricultural chemicals.

Resource Development

Includes the operation of both domestic and foreign businesses, either wholly or majority owned. These involve certain iron ore, coal, uranium and other mineral properties; the development of commercial outlets for currently owned mineral resources considered as excess to U. S. Steel's requirements, either by outright sale or development; the activities of the ocean transportation companies; and the search for and development of new mineral and energy reserves.

Fabricating & Engineering and Other

Includes the fabrication and erection of structural steel for buildings, bridges, storage tanks and other structures; the fabrication of barges, ship sections, transmission towers, large diameter pipe and a variety of standard fabricated steel products; sales of steel mill products by a network of domestic steel service centers; the manufacture and marketing of gas and oil field drilling and pumping equipment, electrical cable and products for residential housing; the production of cement; and technology licensing, engineering and consulting services. Also includes real estate and miscellaneous operations.

Domestic Transportation & Utility Subsidiaries

Includes common carrier railroads, domestic barge lines, gas utility companies and a dock company. These subsidiaries, operating autonomously, serve the general public including U. S. Steel and charge for their services on the basis of rates filed with and approved by regulatory agencies as applicable or by contract rates.

UNITED STATES STEEL CORPORATION
ESTIMATED REPLACEMENT COST INFORMATION
(Unaudited)

By Accounting Series Release 190 (ASR 190) issued in 1976, the Securities and Exchange Commission requires disclosure of the estimated current cost of replacing total inventory and productive capacity at year-end, the depreciated net replacement cost of fixed assets, and the effects of the assumed replacements on depreciation and cost of sales. The Commission acknowledged that this rule is a limited one and does not measure either the effects of inflation or the current value of all assets and liabilities.

Investors and analysts are cautioned against simplistic use of the data. The disclosure requirements were not designed to provide a basis for adjusting net income and balance sheet values. In addition, due to widely varying subjective judgments and assumptions, as well as different factual circumstances involved, the data are not comparable among companies and are inherently subject to errors of estimation.

Inventories

For LIFO inventories, current acquisition costs were applied to year-end inventory quantities. Non-LIFO inventories are reflected at current actual cost. This estimate of current replacement cost, which excludes the cost reduction of own-produced inventories that would result from the more efficient replacement facilities, is more than double the historical cost amount reflected in the balance sheet. Sufficient calculations of cost benefits were made to establish that cost reduction from facility replacements would be substantial. This subject is further discussed under Cost of Sales.

Property, Plant and Equipment

The current replacement cost disclosure requirements comprehend all fixed assets (plus certain leased facilities) except land, construction in process and mineral resources. The replacement cost estimates, which are three to four times the historical costs reflected in the balance sheet, are necessarily tentative and subject to future modification. It is believed that these estimated replacement costs (new), required by ASR 190, would exceed the costs of maintaining some portion of capacity by the renovation of existing facilities. The extent to which lower cost replacement opportunities might evolve for such renovation, or for further consolidating existing plants into larger scale plants over the years, is not comprehended because of currently unknown future conditions.

For the most part, the gross property, plant and equipment replacement costs were estimated by the use of functional prices, utilizing present day technology and recognizing current environmental requirements. The costs of recent facility installations were updated to current price levels, and engineering project estimates were utilized for other facilities including the normal complement of support facilities such as in-plant utilities, transportation and maintenance equipment. These estimates, compiled in terms of cost per unit of capacity of type of operation, were applied to the productive capacities of facilities comprising over 90% of the estimated gross replacement cost. The historical costs of the remaining miscellaneous fixed assets currently in use were indexed by year of acquisition to present price levels. As required by ASR 190, net depreciated replacement cost was calculated based on the estimated gross replacement cost adjusted for the expired portion of the currently estimated total service potential of present facilities.

Cost of Sales

This replacement cost estimate represents the historical cost of products and services sold adjusted to a replacement cost basis for the LIFO inventories used and reduced for the rental cost of leased facilities that were capitalized in developing fixed asset replacement costs. The resultant amount, not adjusted to reflect the productivity and efficiency gains that would be realized from the use of new facilities, is approximately the same as the historical costs reflected in the income statement.

It would be entirely impractical to currently fully engineer and evaluate the eventual replacement of the Corporation's entire productive capacity, since future product markets and plant locations are unknown. The timing of such replacements would necessarily extend far into the realm of undeterminable future technology and economic conditions. However, sufficient calculations of cost benefits were made to determine that they would be substantial. Based on studies that have been made, U. S. Steel management believes that the cost savings from completely replacing present capacity over the years would offset the additional depreciation from the significantly increased investment.

Depreciation (Wear and Exhaustion of Facilities)

The estimated replacement cost depreciation, based upon the required determinations, is approximately double the historical costs reflected in the income statement. In accordance with ASR 190, this estimate is based on the economic lives and straight-line method used in calculating historical cost depreciation, thus excluding any depreciation for fully depreciated investments. It was calculated by (a) dividing the estimated gross replacement cost by the comparable historical gross cost indexed to a current price level, and then (b) multiplying the result by the price indexed historical depreciation for the investment currently being depreciated.

If all assumed replacement facilities were currently being depreciated based on the presently estimated service potential of existing facilities, replacement cost depreciation could be three to four times the historical costs reflected in the income statement. The estimated service potential of existing assets reflects a long period of history during which cash flow from profits and depreciation allowances was inadequate to provide and attract the funds necessary to keep pace with technological advances. Depreciation allowances based on the historical costs of existing facilities have been and continue to be inadequate to support the increasing capital requirements for replacements, modernization and environmental control facilities at the higher current costs of the new facilities. These added costs, which at present can only be recovered through depreciation over many future years, are in effect currently taxed as if they were profits. The result is the taxing away of much of the capital needed to meet the steadily rising costs of inflation.

Summary of Replacement Cost Data

	(In billions)					
	Assets Subject to Replacement Cost Disclosure					
	Estimated Replacement Cost		Present Recorded Cost		Total Amount Per Financial Statements	
	1979	1978	1979	1978	1979	1978
At Year-End						
Inventories	$ 3.4	$ 3.2	$ 1.3	$ 1.3	$ 1.3	$ 1.3
Property, Plant and Equipment						
Gross	$48.8	$45.4	$12.7	$12.4	$13.5	$13.2
Net	17.1	15.3	5.7	5.3	6.4	6.0
For The Year						
Cost of Sales	$10.8	$ 9.1	$10.7	$ 9.0	$10.7	$ 9.0
Depreciation (Wear & Exhaustion of Facilities)	1.1	.9	.5	.4	.5	.4

Mineral Resources (Other than Oil and Gas)

Expenditures for acquiring mineral rights, leases or properties; exploration activities; and development of mineral bodies of $80 million in both in 1979 and 1978 were charged to consolidated income. In addition, expenditures of $5 million in 1979 and $10 million in 1978 were capitalized. The Corporation's consolidated balance sheet at December 31, 1979 included $215 million and at December 31, 1978 included

$225 million in land and deferred amounts, both carried at net value, for these types of expenditures. The current year amortization of such capitalized costs was $15 million in 1979 and $20 million in 1978. Excluded from development expenditures were plant and equipment assets which U. S. Steel management normally associates to the mining of these minerals and which others might treat as development assets. These have been considered as productive capacity and included in assets subject to replacement cost disclosure.

The majority of domestic reserves of iron ore, coal and limestone were purchased or leased prior to 1940 while Canadian iron ore reserve mining rights were obtained primarily in the late 1950's and the 1960's. Present mineral reserves are sufficient to support operations in the foreseeable future.

Conclusion

The required replacement cost data do not reflect all of the effects of inflation on the Corporation's income whether favorable or unfavorable. U. S. Steel management has endeavored over the years to modify selling prices to maintain a reasonable return on equity when permitted by markets, competitive conditions and governmental restrictions. The current relationship of costs, selling prices and net income reflects changing economic conditions, including the effects of inflation. The effects of inflation are not measured by either historical costs or by the replacement cost requirements of ASR 190. U. S. Steel management continues to caution that the replacement cost data required by ASR 190 provides no basis for adjusting reported net income and balance sheet values. The conceptual shortcomings of this approach have now been acknowledged by the SEC. Accordingly, this requirement is terminated commencing with 1980 reporting when the Supplementary Information on Changing Prices will include the required data on a current cost basis as well as the constant dollar basis required (reported on page 35) for 1979.

UNITED STATES STEEL CORPORATION

SCHEDULE V—PROPERTY, PLANT AND EQUIPMENT
SCHEDULE VI—ACCUMULATED DEPRECIATION AND AMORTIZATION

(In millions)

Year 1979	Balance Dec. 31, 1978	Additions	Deductions**	Other Changes Addition***	Balance Dec. 31, 1979
Property, plant and equipment (at cost)					
Land	$ 293.1	$ 17.4	$ 8.0	$ —	$ 302.5
Buildings	1,451.4	46.3	56.6	4.3	1,445.4
Machinery and Equipment	11,342.5	895.1	817.7	197.0	11,616.9
Capital leases—machinery & equipment	96.6	20.2	.8	—	116.0
Total	13,183.6	979.0*	883.1	201.3	13,480.8
Less					
Depreciation and amortization					
Buildings	703.6	39.5	48.3	.2	695.0
Machinery and equipment	6,469.0	478.4	668.1	41.7	6,321.0
Capital leases—machinery & equipment	36.0	13.6	.7	—	48.9
Total	7,208.6	531.5	717.1	41.9	7,064.9
Net	$ 5,975.0	$447.5	$166.0	$159.4	$ 6,415.9

*Reflects expenditures for many varied facilities, none of which is in excess of 2% of total assets.

**Includes effects of retirement of facilities related to planned permanent shutdown of several steel and nonsteel plants and manufacturing facilities (see Note 19 to Financial Statements).

***Prior year accounting changes for own engineering costs and blast furnace linings (see Note 21 to Financial Statements).

(In millions)

Year 1978	Balance Dec. 31, 1977	Additions	Deductions	Balance Dec. 31, 1978
Property, plant and equipment (at cost)				
Land	$ 283.9	$ 13.1	$ 3.9	$ 293.1
Buildings	1,419.7	38.4	6.7	1,451.4
Machinery and Equipment	10,819.9	595.2	72.6	11,342.5
Capital leases—machinery & equipment	18.0	21.1	(57.5)**	96.6
Total	12,541.5	667.8*	25.7	13,183.6
Less				
Depreciation and amortization				
Buildings	667.5	40.5	4.4	703.6
Machinery and equipment	6,148.8	391.6	71.4	6,469.0
Capital leases—machinery & equipment	1.0	3.5	(31.5)**	36.0
Total	6,817.3	435.6	44.3	7,208.6
Net	$ 5,724.2	$232.2	$(18.6)	$ 5,975.0

*Reflects expenditures for many varied facilities, none of which is in excess of 2% of total assets.

**Includes the effect of capitalizing pre-1977 capital leases due to retroactive application of FAS No. 13. This includes Property, plant and equipment $56.3 million and accumulated depreciation $31.5 million.

UNITED STATES STEEL CORPORATION

SCHEDULE XII—RESERVES

Year 1979	Balance Dec. 31, 1978	Additions Charged Income	Deductions*	Balance Dec. 31, 1979
	(In millions)			
Estimated bad debts	$15.2	$2.9	$ 4.2	$13.9
Estimated losses on investments	32.3	.9	27.1†	6.1
Total	$47.5	$3.8	$31.3	$20.0

*Represents appropriate charges against reserves or transfers to and from other accounts.

†Includes $27.4 reversal of unrealized loss on marketable securities.
(See Note 3 to Financial Statements.)

Year 1978	Balance Dec. 31, 1977	Additions Charged Income	Deductions*	Balance Dec. 31, 1978
	(In millions)			
Estimated bad debts	$ 13.0	$ 2.6	$ .4	$ 15.2
Estimated losses on investments	31.0	(.3)	(1.6)†	32.3
Total	$ 44.0	$ 2.3	$(1.2)	$ 47.5

*Represents appropriate charges against reserves or transfers to and from other accounts.

†Includes $(5.3) unrealized loss on marketable equity securities.
(See Note 3 to Financial Statements.)

PART II

14. Executive Officers of the Registrant.

The executive officers of the Corporation and their ages as of March 1, 1980 are as follows:

James E. Chenault, Jr.	52	Group Vice President—Resource Development
Marion G. Heatwole	60	General Counsel
Duncan J. MacLennan	63	Group Vice President—Chemicals
David M. Roderick	55	Chairman of the Board of Directors
William R. Roesch	54	President
Raymond D. Ryan	58	Vice President and Treasurer
Charles G. Schwartz	61	Secretary and Assistant General Counsel
Earl L. Simanek	59	Group Vice President—Manufacturing Divisions and Associated Subsidiaries
Bracy D. Smith	60	Vice President and Comptroller
Robert W. Smith	63	Group Vice President—Steel
W. Bruce Thomas	53	Executive Vice President—Accounting and Finance

With the exception of William R. Roesch, all of the above executive officers have held responsible management or professional positions with the Corporation or its subsidiaries for more than the past five years. Mr. Roesch was elected Executive Vice President—Steel and Domestic Raw Materials of the registrant on February 15, 1978, a director on February 28, 1978 and President effective April 24, 1979. From 1974 to 1977, he was Vice Chairman and Chief Executive Officer of Kaiser Steel Corporation. From 1971 to 1974, he was Chairman and Chief Executive Officer of Jones & Laughlin Steel Corporation.

APPENDIX D

COST OF RECLAMATION

Total Cost of Reclamation

1.	Demolition of concrete	$209,000
2.	Site grading	36,000
3.	Powerline removal	2,000
4.	Track removal	76,000
5.	Revegetation	60,000
	Total Cost	$383,000

Notes and Information

The development of the cost of reclamation is based on the following:

Assumptions

1. That all steel structures have been dismantled and removed.

2. The salvage value of the steel structures exceeds the cost of dismantling and removal.

3. The reclamation cost will begin with demolition of the concrete structures that are to be removed.

4. The rail to be removed in the reclamation of the tracks has a value of $150.00 per ton (A & K Railroad Supply, Clearfield, Utah).

5. The below grade voids are adequate for the disposal of the demolished concrete.

Basic Data and Development of Costs

1. Demolition of concrete structures and foundations.

   Volume of concrete to be demolished (cy) 2,746

   Cost per yard for demoliton $76.00

   Total Cost of Concrete Disposal $208,696

2. Site Grading

2.1	Material to be graded (bcy)	75,000
2.2	Swell factor	1.30
2.3	Total grading (LCY)	98,000
2.4	Production factors caterpillar D8K bulldozer with a universal blade - capacity LCY/Hr.	4.50
	Average operator	0.75
	Material	0.80
	Job efficiency	0.84

2.5	Estimated LCY moved/hr	227
2.6	Total bulldozer time (hours)	432
2.7	Bulldozer cost per hour	$ 83.75
2.8	Total grading cost	$36,000

3. <u>Powerline Removal</u>

3.1	Power poles to be removed	23
	Removal cost per pole	$45
	Total Cost	$1,035
3.2	Lineal feet of conductors (miles)	1
	Removal cost per mile	$958
	Total Cost	$958
3.3	Total cost powerline removal	$2,000

4. <u>Track Removal</u>

4.1	Lineal feet of track (feet)	19,500
	Cost per foot for removal	$9.50
	Total cost for removal	$185,250
4.2	Salvage Value	
	Lineal feet of rail	39,000 feet
	Wt per foot 112 lb tail (tons)	.0187
	Total weight of rail (tons)	729.3
	Salvage value @ $150.00 per ton	$109,395
4.3	Net cost of track removal	$75,855

5. <u>Revegetation</u>

The estimated cost of revegetation is based on revegetation of the disturbed areas west of the Price River.

Acres of disturbed area to be seeded	123
Preparation and seeding per acre	$488
Total preparation and seeding	$60,024

REFERENCES

(1) Catepillar Performance Handbook, Edition 10, October 1979.

(2) Building Construction Cost Data 1980, 38th Annual Edition.

(3) Building Construction Cost Data 1981, 39th Annual Edition

(4) Rental Rate Blue Book, Equipment Guide Book Company

(5) Mining and Reclamation Plan - Geneva Mine - United States Steel Corporation - Appendix C

APPENDIX E

VEGETATIVE SURVEY
U. S. STEEL PROPERTIES
WELLINGTON, UTAH

Robert M. Thompson
February 1981

A vegetative and floristic survey was made of the U. S. Steel properties on February 23, 1981. The purpose of this survey was to map the vegetative types; list the dominant plant species, and identify any endangered, threatened, or sensitive species.

Each vegetative type was sampled using a 9.6 square foot circular plot. Data collected from these plots and other occular reconnaissance was used to determine plant species composition, ground cover density and site productivity. Sampling points were selected at sites that were considered to be representative of the plant type. Vegetative types were delineated on base maps of the area. Each vegetative type was then inspected on the ground and characterized according to their dominant and other indicator plant species. All of the present disturbed areas and facilities are located in the (2A) Mat Saltbrush - Indian Ricegrass, and (2B) Mat Saltbrush - Shad Scale - Galleta grass types. The railroad tracks and right-of-way are within the (3A) Greasewood - Summer cypress plant community.

The vegetative types and plant communities that occur within this area all belong in the desert shrub plant association. The vegetative cover of the plant types occurring on the ridges and upper slopes is usually quite sparse, averaging less than 10 percent in most types. Forage production is variable and is dependent on the amount of moisture received. The Mat Saltbrush type is the least productive of all the plant communities in this area. The Shad-Scale - Galleta grass type is the most productive.

Plant types in the bottom lands mostly have good vegetative cover, averaging 50 to 100 percent cover. Forage production potential is controled by the amount of alkali and salts present in the soils. The Greasewood - Summer cypress - type is the least productive of any type found in the bottomlands. See Table 1.

Endangered, Threatened or Sensitive Plant Species

The following plant species that are known to occur in Carbon County have been proposed to the Fish and Wildlife Service for inclusion on their lists of Endangered, Threatened and Sensitive Plants.

Endangered Species

Eriogonum corymbosum var. davidesi
Eriogonum lancifolium
Cryptantha johnstonii

Threatened Species

Cryptantha jonesiana

None of the above listed plant species were found on this study area. However, a small area located on one of the upper ridge tops contains some habitat that is suitable for Cryptantha joensiana but no plants or evidence of this plant was found. Therefore, this area is cleared from an endangered or threatened plant species standpoint.

Revegetation

Plant types 3A, 3B, 3C and 3D are not suitable for any types of revegetation measure. This is because of the very narrow growth limitation of the habitats here. These sites are very high in alkalis and free salts. Also, the water table is very high. Disturbed sites in these types are better left to be reinvaded by the native plants common on the site.

Plant types 1A and 1B, if disturbed, could be treated and reseeded with a mixture of native plant species or several species of introduced plants will do good here.

Types 2A and 2B, if disturbed, (most of the facilities are here) can be reseeded with such native species as Indian Ricegrass, Alkali Sacation, Shad Scale and Alkali Seepweek. The seed sources for these plants should be from sites with heavy clay soils and similar habitats.

The reclamation of the refuse piles will be difficult. This is because of the dark color of the material, which prevents the establishment of any plant growth. These piles may need to be covered with a thin layer of top soil, 4 to 6 inches thick before any plants will be able to become established. The introduction of such native annual plants as Lamb Quarter (Chenopodium album or leptophyllum), Red Root (Amaranthus spp.) and the introduced annual Black Mustard (brassica nigra) onto those piles that have had a chance to become more stable should provide a type of cover crop which in time will make it possible for the invasion of native perennial plants.

Vegetative Types and Plant Communities

Map No.	Type and Community
1	Ridges and Rocky Slopes
1A	Shad Scale - Galleta grass (Atriplex confertifolia - Hilaria jamesii)
1B	Shad Scale - Indian Ricegrass (Atriplex confertifolia - Oryzopsis hymenoides)
2	Alluvial Toe Slopes and Valley Bottoms
2A	Mat Saltbrush - Indian Ricegrass (Atriplex corrugata - Oryzopsis hymenoides)
2B	Mat Saltbrush - Shad Scale - Galleta grass (Atriplex corrugata - Atriplex confertifolia - Hilaria Jamesii)
2C	Mat Saltbrush (Antriplex corrugata)
3	Bottom Lands
3A	Greasewood - Summer cyprus (Sarcobatus vermiculatus - Kochia americana)
3B	Saltgrass - Reed Canary grass (Distichlis stricta - Phalaris arundinacea)
3C	Reed Canary grass - Wiregrass (Phalaris arundinacea - Juncus gerardi)
3C	Reed Canary grass (Phalaris arundinacea - Juncus gerardi)
3D	Tamarisk - Saltgrass - River bottom (Tamarix pentardra - Distichlis stricta)
4	Cultivated Fields

Ridges and Rocky Slopes

Type 1A. Shad Scale - Galleta grass
(Atriplex confertifolis - Hilaria jamesii)

This plant type occurs on all the higher ridges, plateaus and steep rocky slopes within and adjacent the property. Vegetative cover is dominated by Shad Scale and Galleta grasses. Many other plant species common to the desert shrub plant association are also found here.

Dominant Species

Shad Scale - Atriplex confertifolia
Galleta grass - Hilaria jamesii

Other Common Species

Blue grama - Bouteloua gracilis
Indian Ricegrass - Oryzopsis hymenoides
Cryptantha - Cryptantha flavoculata

Plant Composition	Percent
Grasses	62
Forbs	12
Shrubs	26

Ground Cover Data	
Vegetative cover	3
Litter cover	4
Total Ground Cover	7
Bare Soil	63
Rocks	30

This plant type is presently at about 90 percent of its productive potential. Average green weight production is about 400 pounds per acre.

Endangered, Threatened and Sensitive Plant Species

No listed or proposed endangered, threatened or sensitive plant species were found during the survey. However, a small amount of habitat does exist on the high ridge for Cryptantha jonesiana.

Type 1B - Shad Scale - Indian Rice grass

(Atriplex confertifolia - Lryzopsis humenoides)

This plant type occurs on steep slopes and ridges which are rocky, with Mancos shale outcrops. Vegetative cover at present is dominated by Shad Scale and several species of grasses which are common to the desert shrub plant association.

Dominant Species

Shad Scale - Atriplex confertifolia
Indian Ricegrass - Oryzopsis hymenoides

Other Common Species

Galleta Grass - Hilaria jamesii
Desert Trumpet - Eriogonum inflatum
Bud Sage - Artemisia spinescens

Plant Composition	Percent
Grasses	56
Forbs	10
Shrubs	34

Ground Cover	
Vegetative cover	5
Litter cover	5
Total Ground Cover	10
Bare soil	73
Rocks	17

This plant type is within the area that has been disturbed in the recent past and much of the type is now in a successional stage of development. The type is at about 60 percent of its productive potential. Present production average about 300 pounds green weight per acre.

Endangered, Threatened and Sensitive Plant Species

No listed or proposed endangered, threatened or sensitive plant species or their habitat were found in this plant type.

Alluvial Toe Slopes and Valley Bottoms

Type 2A. Mat Saltbrush - Indian Ricegrass
(Atriplex corrugata - Oryzopsis humenoides)

This plant type occurs on the upper open broad alluvial slopes. Soils are heavy clays and vegetation is very sparse and scattered.

Dominant Species

Mat Saltbrush - Atriplex corrugata
Indian Ricegrass - Oryzopsis hymenoides

Other Common Species

Galleta grass - Hilaria jamesii
Desert Trumpet - Eriogonum inflatum
Winter Fat - Ceratoides lanata

Ground Cover Data	Percent
Vegetative cover	2
Litter cover	3
Total Ground Cover	5
Bare soil	95
Rocks	0

Green weight production for this type will average near 200 pounds per acre. It has a very poor potential for revegetation. The two settling ponds are in this type.

Endangered, Threatened and Sensitive Plant Species

No endangered, threatened or sensitive plant species or their habitat were found in this type.

Type 2B. Mat Saltbrush - Shad Scale - Galleta Grass
(Atriplex corrugata - Atriples confertifolia - Hilaria jamesii)

This plant type occurs on the lower toe slopes and alluvial fans. Most of the facilities are in this broad type and the native vegetation has nearly been lost.

Dominant Species

Mat Saltbrush - Atriplex corrugata
Galleta grass - Hilaria jamesii

Other Common Species

Shad Scale - Atriplex confertifolia
Desert Trumpet - Eriogonum inflatum

Plant Composition	Percent
Grasses	4
Forbs	7
Shrubs	89

Ground Cover Data

Vegetative cover	2
Litter cover	6
Total Ground Cover	8
Bare soil	88
Rocks	3

This plant type area has very poor, low productive soil and any revegetation will be difficult to do. Native species will eventually reinvade this area but it will take many years, and cover will be sparse. Using introduced species, such as crested wheatgrass, tall wheatgrass and sweet clover, would give a good quick cover and prevent some soil loss.

Endangered, Threatened and Sensitive Species

No listed or proposed endangered, threatened or sensitive plant species, or their habitat is present in this plant type.

Type 2C. Mat Saltbrush
(Atriplex corrugata)

This plant type occurs in several narrow valley bottoms. Soils are very heavy clay alluvium in the bottoms and Mancos shale outcrops along the edges. Vegetation here is very sparse and scattered.

Dominant Species

Mat Caltbrush - Atriplex corrugata

Other Common Species

Squirrel Tail - Sitanion hystrix
Evening Primrose - Oenothera caespitosa

Plant Composition	Percent
Grasses	23
Forbs	14
Shrubs	63

Ground Cover Data	
Vegetative cover	4
Litter cover	3
Total Ground Cover	7
Bare soil	93
Rocks	0

This plant type is near its productive potential, averaging about 100 pounds of forage per acre. It has no revegetation potential. Soils are too alkaline and hard.

Endangered, Threatened and Sensitive Plant Species

At present no listed or proposed threatened, endangered or sensitive plant species or their habitat are known to occur in this plant type.

Bottom Lands

Type 3A. Greasewood - Summer Cypress
(Sarcobatus vermiculatus - Kochia americana)

This plant type occurs along the upper edge of the bottom lands. Vegetative cover is sparse except in sites which have been disturbed, here Kochia forms a very dense cover. Greasewood forms a shrub by overstory in this type.

Dominant Species

Greasewood - Sarcobatus vermiculatus
Summer cypress - Kochia americana

Other Common Species

Plant Composition	Percent
Grasses	0
Forbs	64
Shrubs	36
Ground Cover Data	
Vegetative cover	3
Litter cover	8
Total Ground Cover	11
Bare soil	89
Rocks	6
Shrub Overstory	12

This plant has been heavily impacted in the past. Revegetation of this type will be very difficult because of the high alkalinity and poor permeability of the soil. Introduced species that may be used here are sweet clover, and tall wheatgrass.

Endangered, Threatened and Sensitive Plant Species

No listed or proposed endangered, threatened or sensitive plant species or their habitat is known to occur in this plant type.

Type 3B. Salt Grass - Reed Canary Grass
(Distichlis stricta - Phalaris arundinacea)

This plant type occurs in the lower bottoms, which are very alkaline and high in salt content. Grasses dominate the type, few shrubs can survive in soils with such high salt content.

Dominant Species

Salt Grass - Distichlis stricta
Reed Canary Grass - Phalaris arundinaccea

Other Common Species

Summer Cypress - Kochia americana

Plant Composition	Percent
Grasses	91
Forbs	9
Shrubs	0

Ground Cover Data

Vegetative cover	6
Litter cover	65
Total Ground Cover	71
Bare soil	29
Rocks	0

Due to the very high water table and salt content of the soil in this type, it cannot be revegetated successfully.

Endangered, Threatened and Sensitive Plant Species

No listed or proposed endangered, threatened, or sensitive plant species or their habitat are known to occur in this type.

Type 3C. Reed Canarygrass - Wiregrass
(Phalaris arundinacea - Juncus gerardi)

This plant type is confined to areas that are covered with shallow, very salty water. Very few plant species are able to survive in this type of habitat.

Dominant Species

Reed Canayrgrass - Phalaris arundinacea
Wiregrass - Juncus gerardi

Plant Composition	Percent
Grasses	97
Forbs	3
Shrubs	0

Ground Cover Data

Vegetation and litter cover is 100 percent cover in this type, water averages 3 to 12 inches deep over the entire area.

This type at present, is fully occupied with vegetation of the species that are the climax or plant best suited for this type of habitat. Any disturbance in this type will, in time, be covered with the present species. This area provides good wild bird habitat and cover.

Endangered, Threatened and Sensitive Plant Species

There are no endangered, threatened or sensitive plant species in this plant type.

Type 3D. Tamarisk - Salt Grass - River Bottoms
(Tamarix pentandra - Distichlis stricta)

This plant type occurs along the edges and flood plains of the streambeds and riverbeds.

Dominant Species

Tamarisk - Tamarix pentandra
Salt Grass - Distichlis stricta

Other Species

Summer Cypress - Kochia americana

Plant Composition	Percent
Grasses	18
Forbs	10
Shrubs	72
Ground Cover Data	
Vegetative cover	20
Litter	70
Total Ground Cover	90
Bare soil	10
Rocks	0

This type is quite productive. It has a potential for forage production of about 300 pounds per acre. However, it provides good cover for wild birds and small mammals of many kinds.

Endangered, Threatened and Sensitive Plant Species

No endangered, threatened or sensitive species or their habitat are known to occur in this vegetative type.

Type 4. Old Cultivated Fields

The plants present in these sites, that were once tilled and irrigated, are mostly introduced weedy plants such as Gumweed and Povertyweed. Saltgrass is rapidly invading the lower edges of these sites. These fields are capable of producing a good cover crop. At present they are only producing about one-fifth of what they could. Planting a cover crop on these sites, consisting of several species of clovers, alfalfa and smooth brome, would provide a good wildlife food source, especially for wild birds.

Table - 1: Percent Plant Composition, Ground Cover Data and Average Forage Production for each of the Vegetative Types.

	Vegetative Types									
	1A	1B	2A	2B	2C	3A	3B	3C	3D	4
Plant Composition										
Percent Grasses	62	56	8	4	23	0	91	97	18	15
Percent Forbs	12	10	32	7	14	64	9	3	10	80
Percent Shrubs	26	34	60	89	63	36	0	0	72	5
Ground Cover Data										
Percent Vegetative Cover	3	5	2	2	4	3	6	-	20	5
Percent Litter Cover	4	5	3	6	3	8	65	-	70	15
Percent Total Ground Cover	7	10	5	8	7	11	71	100	90	20
Percent Bare Soil	63	73	95	88	93	89	29	0	10	80
Percent Rocks	30	17	0	3	0	0	0	0	0	0
Forage Production Potential lbs/Acre Green Weight	400	300	300	200	100	150	300	800	600	800

Table - 2: Plant Species and Rates of Seeding

Native Species		Rate
Grasses		
Alkali sacaton	Sporobolus airoides	1 lb/A
Indian Ricegrass	Oryzopsis humenoides	1 lb/A
Galleta Grass	Hilaria jamesii	1 lb/A
Squirrel Tail	Sitanion hystrix	1 lb/A
Forbs		
Seepweed	Suaeda fruticosa	1/2 lb/A
Lamb Quarter	Chanopodium album	1/4 lb/A
Globe-mallow	Sphaeralcea coccinea	1/2 lb/A
Shrubs		
Shadscale	Atiplex conifertifolia	2 lbs/A
Gardner Saltbrush	Atiplex gardneri	2 lbs/A
Winterfat	Ceratoides lanata	2 lbs/A
Introduced Species		
Crested Wheatgrass	Agropyron cristatum	3 lbs/A
Streambank Wheatgrass	Agropyron riparium	2 lbs/A
Russian Wildrye Grass	Elymus junceus	
Smooth Brome (pasture variety)	Bromus inermis	4 lbs/A
Meadow Fescue	Festuca elatior	4 lbs/A
Yellow Sweet Clover	Melilotus officinalis	1 lb/A
Common Alfalfa	Medicago sativa	1/2 lb/A
Red Clover	Trifolium pratense	1 lb/A
Tall Wheatgrass	Agropyron elongatum	2 lbs/A

PLANT SPECIES

Common Name	Botanical Name	Vegetative Types 1	2	3	4
Grasses					
Bluegrama	Bouteloua gracilis	X			
Galleta Grass	Hilaria jamesii	X	X		
Indian Ricegrass	Oryzopsis hymenoides	X	X		
Reed Canarygrass	Phalaris arundinacea			X	X
Saltgrass	Distichlis stricta			X	X
Squirrel Tail	Sitanion hystrix	X	X		
Wiregrass	Juncus gerardi			X	
Forbs					
Cryptantha	Cryptantha flauoculata	X			
Cryptantha	Cryptantha wetherillii	X			
Desert Trumpet	Eriogonum inflatum	X	X		
Evening Primrose	Oenothera caespitosa	X	X		
Globemallow	Sphaeralcea coccinea	X			
Gumweed	Grindelia squarrosa				X
Povertyweed	Iva axillanis				X
Summer cypress	Kochia americana			X	X
Desert Plantain	Plantago purshii	X	X		
Shrubs					
Bud sage	Artemisia spinescens	X			
Big sagebrush	Artemisia tridentata	X			
Shrubby Buckwheat	Eriogonum microthecum	X			
Match Brush	Gutierrezia sarothrae	X	X		
Greasewood	Sarcobatus vermiculatus			X	
Mat Saltbrush	Atriplex corrugata		X		
Gardner Saltbrush	Atriplex gardneri	X			
Shad Scale	Atriplex confertifolia	X	X		
Tamarisk	Tamarix pentandra			X	X
Winterfat	Ceratoides lanata		X		